

TOSHIBA

FILE NO. 030-9925

SERVICE MANUAL

COLOUR TELEVISION

C8SS Chassis

2998DG, 3398DG

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CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a (C) V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

Refer to table-1 for high voltage (A), (B) & AC voltage (C).
(See SETTING & ADJUSTING DATA on page 16)

Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

SET-UP ADJUSTMENT

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

1. Color Purity
2. Convergence
3. White Balance

Note: The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning. Refer to figure 1.

(Mounting position of the purity magnet assembly should fit to same position as old one because slightly difference to the position depend on a tube.)

- * There are no adjustment of purity and convergence in some picture tube (Unified with purity magnet)

COLOR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the brightness and contrast to maximum.
3. Use a green raster from among the built-in test signals.
4. Loosen the clamp screw holding the yoke and slide the yoke backward or forward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (See figure 2.) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, enter the raster vertically.
7. Slowly move the yoke forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster.

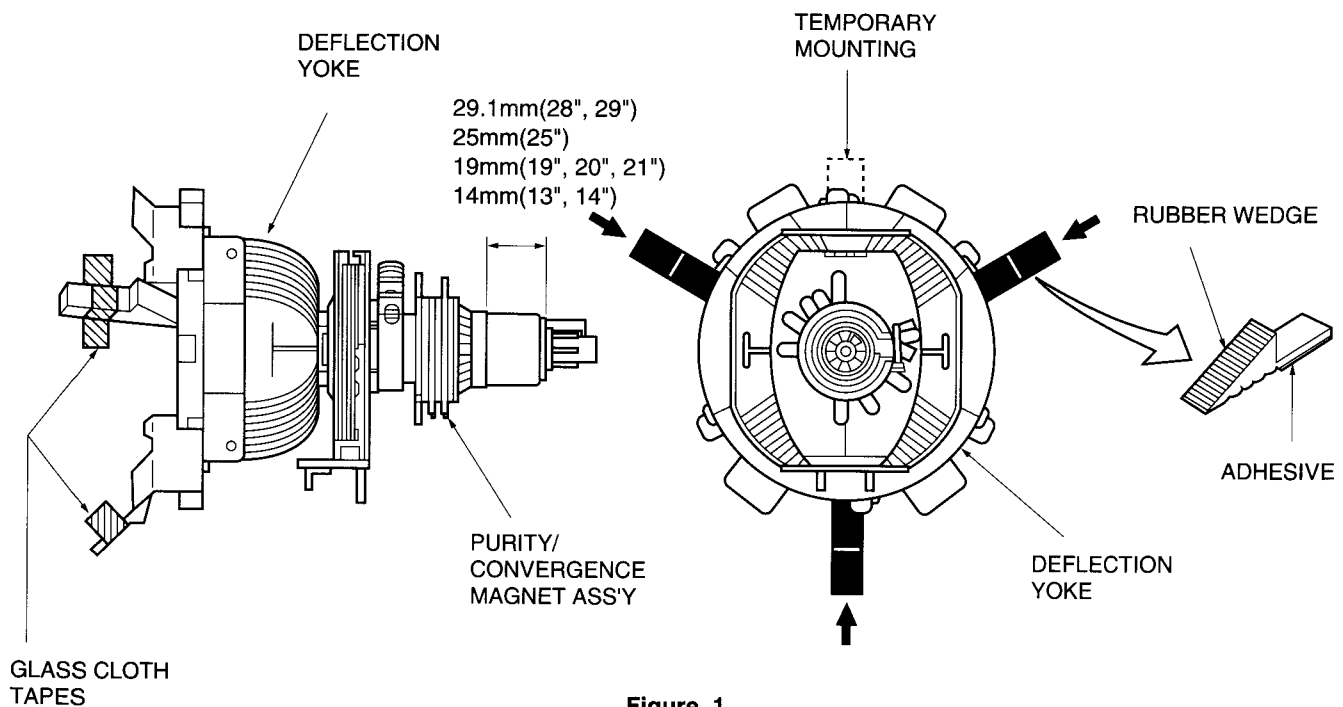


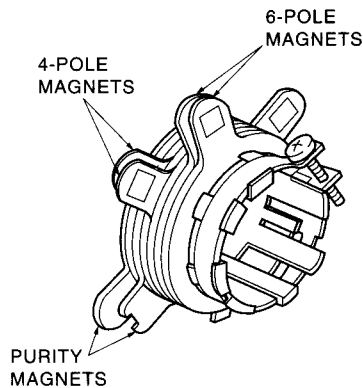
Figure 1.

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

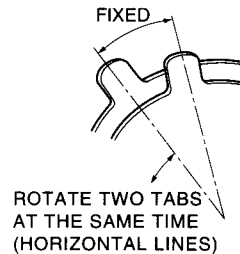
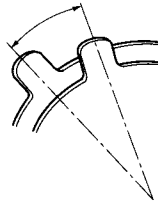
■ CENTER CONVERGENCE ADJUSTMENT

1. Use the cross-dot pattern from among the built-in test signals.
2. Set the brightness and contrast for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 2.) and superimpose red and blue vertical lines in the center area of the picture screen.
4. Turn the both tabs at the same time keeping the angle constant to superimpose red and blue horizontal lines at the center of the screen.
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5 keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets have mutual interaction and make dot movement complex.



CONVERGENCE MAGNET ASSEMBLY

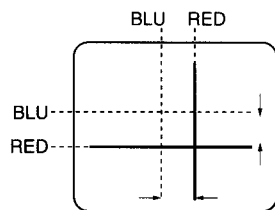
ADJUST THE ANGLE
(VERTICAL LINES)



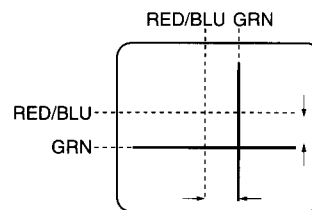
ROTATE TWO TABS
AT THE SAME TIME
(HORIZONTAL LINES)

ADJUSTMENT OF MAGNETS

Figure 2.

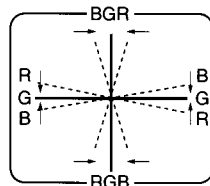


4-POLE MAGNETS MOVEMENT

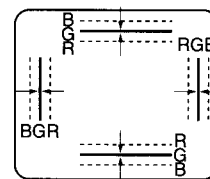


6-POLE MAGNETS MOVEMENT

Center Convergence by Convergence Magnets



INCLINE THE YOKE UP (OR DOWN)



INCLINE THE YOKE RIGHT (OR LEFT)

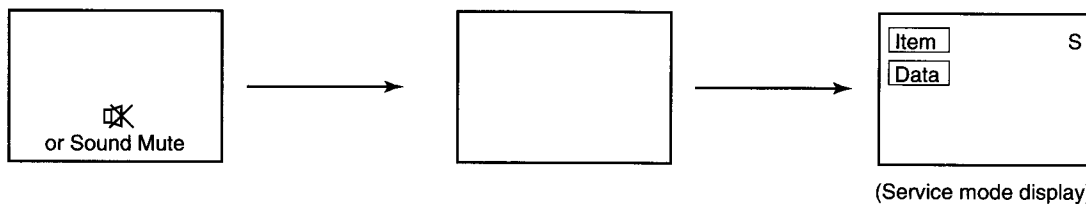
Circumference Convergence by DEF Yoke

Figure 3. Dot Movement Pattern

SERVICE MODE

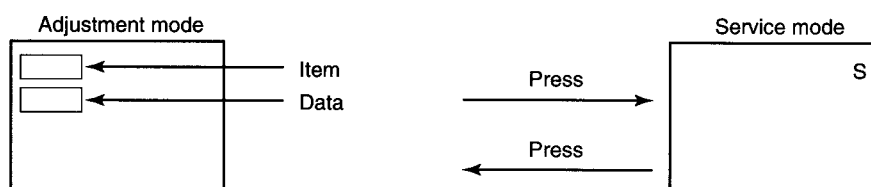
1. ENTERING TO SERVICE MODE

- 1) Press  button once on Remote Control.
- 2) Press  button again to keep pressing.
- 3) While pressing the  button, press MENU button on TV set.



2. DISPLAYING THE ADJUSTMENT MENU

- 1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF:

Test signal selection :

Selection of the adjustment items :

Change of the data value :

Adjustment menu mode ON/OFF :

Initialization of the memory (QA02) :

Reset the count of operating protect circuit to "00":

"RCUT" selection :

"GCUT" selection :

"BCUT" selection :

"CNTX" (or "SCNT") selection :

"COLC" selection :

"TNTC" selection :

Test audio signal ON/OFF (1kHz) :

Self diagnostic display ON/OFF :

- / - - button (on Remote) or  button (on TV)

 button (on Remote)

Channel  /  (on TV & Remote)

Volume  + / - (on TV & Remote)

MENU button (on TV)

CALL + Channel button on TV ()

CALL + Channel button on TV ()

1 button

2 button

3 button

4 button

5 button - - - - Color thickness correction

6 button

8 button

9 button

note: Displayed differently as shown below, depending on the setting of the receiving color system.

COLP (PAL)

COLC (NTSC)

COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

- 1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2.
(▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 16)

5. ADJUSTING THE DATA

- 1) Pressing of VOLUME ▲ +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

- 1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.

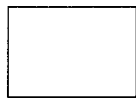
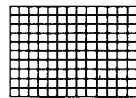
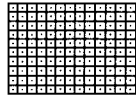
1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been completed.
3. Check the picture carefully. If necessary, adjust any adjustment item above.
Perform "Auto search Memory" on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

- 1) Every pressing of ⏻ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

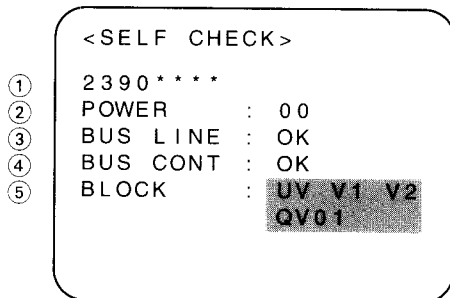
Signal off —→ NTSC signals (14 patterns)
 ↑ PAL signals (14 patterns) ←

Signals	Picture
• Red raster • Green raster • Blue raster • All Black • All White	
• Black & White	
• Black cross-bar • White cross-bar • Black cross-bar on green raster	
• Black cross-hatch • White cross-hatch	
• Black cross-dot • White cross-dot	
• H signal (white) • H signal (black)	

* The signals marked with  are not usable to display in the Test signal for some model.

8. SELF DIAGNOSTIC FUNCTION

- 1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
The diagnosis will begin to check if interface among IC's are executed properly.
- 2) During diagnosis, the following displays are shown.



- ① Part number of microcomputer (QA01)
- ② Operation number of protecting circuit ----"00" is normal.
When indication is other than "00", overcurrent apt to flow, and circuit parts may possibly be damaged.
- ③ BUS LINE CHECK ----"OK" is normal.
"SDA1-GND" ----- SDA-GND short circuit.
"SCL1-GND" ----- SCL-GND short circuit.
"SCL1-SDA1" ----- SCL-SDA short circuit.
- ④ BUS CONT ----"OK" is normal.
When indication shows "Q ○○○ NG", the device with the number may possibly be damaged.
- ⑤ BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (←①)
V2 : VIDEO 2 input mode (←②)

Indicated color of mode now selected : Green and Red
Indicated color of other modes : White

Green : Normal

Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.

QV01 : In case of indication green ---Normal
In case of indication red with input signal---
Failure may exist in output line including QV01.

NOTE: Component which controls character display on screen is ICF01 (TELETEXT IC.). If this display function fails to operate due to damage in ICF01, self diagnosis procedure is as follows.

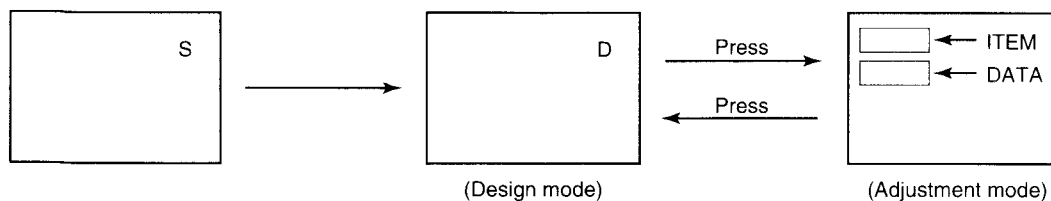
- (1) In case that power indicator is blinking with interval of 0.5 seconds; it means protecting circuit (Current limiter) is operating, and circuit components may possibly be damaged. Check related components.
- (2) In case that power indicator is blinking with interval of 1 second; Protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

* The items marked with  are not usable to display in the SELF DIAGNOSTIC FUNCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

- 1) Select the Service mode.
- 2) While pressing  or CALL button on Remote and press MENU button on TV.
- 3) Press MENU button on TV.



When QA02 is initialized, items "OPT0" and "OPT1" of DESIGN MODE are set to the data of the representative model of this chassis family.

Therefore, because ON-SCREEN specification remains in the state of the representative of model. This model is required to reset the data of items "OPT0" and "OPT1".

2. SELECTING THE ADJUSTING ITEMS

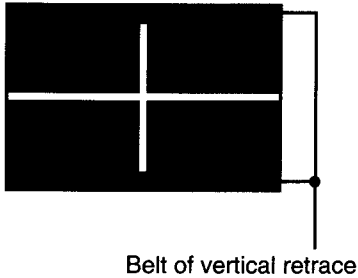
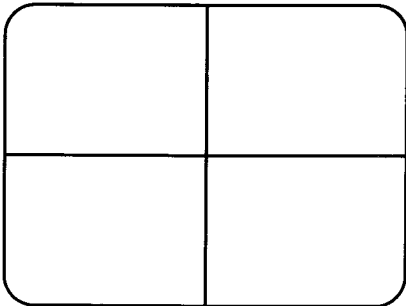
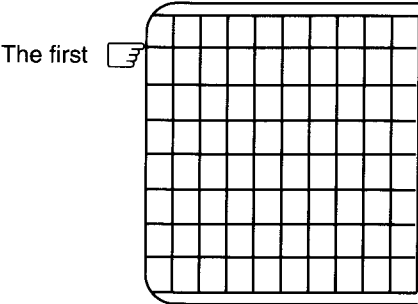
Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3. (▲ button for reverse side)

Refer to table-3 for data of design mode.
(See SETTING & ADJUSTING DATA on page 16)

3. ADJUSTING THE DATA

Pressing of VOLUME ▲ or ▼ button will change the value of data.

ELECTRICAL ADJUSTMENTS

ITEM	ADJUSTMENT PROCEDURE
FOCUS VR ADJ	1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.
SUB-BRIGHTNESS (BRTC) Note: Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT).	1. Set CONTRAST to minimum, and BRIGHTNESS to center by adjusting user controls. 2. Set the TV in service mode to get white cross-bar of inside pattern. 3. Select BRTC (brightness correction), and adjust the $\triangle$ - ∇ button to reduce the value so that white portion of inside pattern slightly light. 4. Adjust $\triangle$ - ∇ button to increase the data value of BRTC, and set it just before the difference between the belt of vertical retrace and the border of black portion of inside pattern is visible. After that, return vertical height and contrast. 
HORIZONTAL POSITION ADJUSTMENT (HPOS) VERTICAL POSITION ADJUSTMENT (VPOS)	1. Set the TV in service mode, and get black or white cross-bar signal with VIDEO button on remote hand unit. 2. Select either HPOS (Horizontal picture phase) or VPOS (Vertical picture phase) with CHANNEL $\blacktriangle$, $\blacktriangledown$ buttons, and adjust horizontal or vertical picture position in the center of screen with VOLUME $\triangle$ - ∇ buttons. 
VERTICAL AMPLITUDE ADJUSTMENT (HIT)	1. Set the TV in service mode, and get black or white cross-hatch signal with VIDEO button on remote hand unit. 2. Select HIT (Vertical amplitude) with CHANNEL $\blacktriangle$, $\blacktriangledown$ buttons, and adjust vertical amplitude with VOLUME $\triangle$ - ∇ buttons so that vertical amplitude lacks a little. 3. Adjust vertical amplitude with VOLUME $\triangle$ - ∇ buttons so that the first bar on cross-hatch signal touches edge of screen. 

ITEM	ADJUSTMENT PROCEDURE
WHITE BALANCE ADJUSTMENT ● CUTOFF ADJUSTMENT (RCUT) (GCUT) (BCUT) ● DRIVE ADJUSTMENT (GDRV) (BDRV)	1. Set Contrast to 40, and brightness to +20 by picture control. 2. Set the TV in service mode, and get the inside W/B adjusting signal with VIDEO button. 3. Select RCUT, GCUT and BCUT with CHANNEL ▲, ▼ buttons, to set individual values to Initial reference data, and to set GDRV and BDRV to Initial reference data with VOLUME ▲ – /+ buttons. 4. Press  button on the remote control and rotate Screen VR to get one slight horizontal line on screen. Note: Every pressing of  button provides Horizontal line picture and Normal picture alternately. 5. Press  button to release horizontal line picture, and select the two other colors which did not light in the above step with CHANNEL ▲, ▼ buttons. Then tap VOLUME ▲ – /+ buttons so that three colors slightly light in the same level. ※ To correct white balance in light area, select GDRV and BDRV with CHANNEL ▲, ▼ buttons to adjust. ※ To correct white balance in dark area, perform fine adjustment of RCUT, GCUT and BCUT. Light area check (to show white) Dark area check (to show black)

C8SS Series (Reference Factory Adjustments)

Item. [SCNT]
<u>Name.</u> SUB-CONTRAST <u>SETTING.</u> DYNAMIC MODE <u>Input signal.</u> SUB-BRIGHT SIGNAL (PAL-I, 80% mod.) <u>Measurement place.</u> Q501 #55PIN (TP501) <u>Adjustment method.</u> Adjust the amplitude from pedestal-level to a white peak. <u>Making standard</u> $2.3 \pm 0.2 \text{Vop}$
Item. [BRTC]
<u>Name.</u> SUB-BRIGHT CENTER <u>SETTING.</u> DYNAMIC MODE <u>Input signal.</u> SUB-BRIGHT SIGNAL <u>Measurement place.</u> On picture <u>Adjustment method.</u> It is black step of the (*sub-bright*) signal and adjust the number. <u>Making standard</u> $4 \pm 1.5 \text{ bar}$
Item. [COLP]
<u>Name.</u> SUB-COLOR CENTER (PAL) <u>SETTING.</u> DYNAMIC MODE <u>Input signal.</u> SUB-BRIGHT SIGNAL (PAL) <u>Measurement place.</u> Q501 #55PIN (TP501) <u>Adjustment method.</u> Adjust the amplitude of B-Y. <u>Making standard</u> $1.40 \pm 0.2 \text{ Vop}$
Item. [RCUT], [GCUT], [BCUT], [GDRV], [BDRV], [SCREEN VR]
<u>Name.</u> CUT OFF/DRIVE ADJUST <u>SETTING.</u> [RCUT], [GCUT], [BCUT], [GDRV], [BDRV] each data set = 40h Set to White line mode0 <u>Input signal.</u> White signal <u>Measurement place.</u> On picture. <u>Adjustment method.</u> Raise screen VR gradually and stop in the place where the line of either of R or G or B shines slightly. Decide the position of screen VR there. Raise the color data other than the line which shines by first gradually shine point. Stop in the place which shines in most white. Make clear white line mode. Adjust it repeatedly for both the shade part and discernment to become a correct numerical value by using proofread CA100. <u>Making standard</u> $103 \text{cd/m}^2 \text{ 8750K } -0.002 \text{uv}$ $17 \text{cd/m}^2 \text{ 8750K } -0.002 \text{uv}$

Item. [BELL]
<u>Name.</u> BELL FILTER <u>SETTING.</u> NONE <u>Input signal.</u> SECAM COLOR BAR. <u>Measurement place.</u> QQ01 #21 (TPM01) <u>Adjustment method.</u> Adjust with the synchroscope as the display crimp is flat. <u>Making standard</u> 100±10%
Item. [SRY]
<u>Name.</u> SECAM R-Y BLACK LEVEL. <u>SETTING.</u> DYNAMIC MODE <u>Input signal.</u> SECAM COLOR BAR. <u>Measurement place.</u> Q501 #55 (TP501) <u>Adjustment method.</u> Adjust [SRY] the level of the monochrome signal part must be a match to the level of horizontal blanking signal. <u>Making standard</u> 0±40mV
Item. [SBY]
<u>Name.</u> SECAM B-Y BLACK LEVEL. <u>SETTING.</u> DYNAMIC MODE <u>Input signal.</u> SECAM COLOR BAR. <u>Measurement place.</u> Q501 #55 (TP501) <u>Adjustment method.</u> Adjust [SBY] the level of the monochrome signal part must be a mutch to the level of horizontal blanking signal. <u>Making standard</u> 0±40mV
Item. [COLS]
<u>Name.</u> SUB-COLOR CENTER (SECAM). <u>SETTING.</u> DYNAMIC MODE <u>Input signal.</u> SECAM COLOR BAR. <u>Measurement place.</u> Q501 #55 (TP501) <u>Adjustment method.</u> Adjust the amplitude of R-Y. (Mute the picture in adjustment) <u>Making standard</u> 1.90±0.2Vop (Pedestal to peak)
Item. [VERT POSITION]
<u>SETTING.</u> CONTRAST=MAX. BRIGHT=CENTER COLOR=CENTER <u>Input signal.</u> WG Philips Pattern (Do not use French SECAM). <u>Measurement place.</u> On Screen <u>Adjustment method.</u> a:Adjust the height so as to appear the flag of both upper and lower side. b:Adjust the picture to the center of the screen by [VPOS].

Item. [V.HEIGHT]	
SETTING.	CONTRAST=MAX. BRIGHT=CENTER COLOR=CENTER
Input signal.	WG Philips Pattern (Do not use French SECAM).
Measurement place.	On Screen
Adjustment method.	Adjust the Picture so as to just disappear the flag of both upper and lower side with [HIT].
Item. [HORIZONTAL POSITION]	
SETTING.	CONTRAST=MAX. BRIGHT=CENTER COLOR=CENTER
Input signal.	WG Philips Pattern (Do not use French SECAM).
Measurement place.	On Screen
Adjustment method.	Adjust the Picture of Philips pattern to the center of the screen with [HPOS]. (Minimize D-C by the CRT adjustment magnetic field)
Item. [HORIZONTAL WIDTH] [SIDE PINCTION] [TRAPEZOID DISTORTION]	
SETTING.	CONTRAST=MAX. BRIGHT=CENTER COLOR=CENTER After V-HIGHT/V-POSITION adjustment.
Input signal.	WG Philips Pattern (Do not use French SECAM).
Measurement place.	On Screen
Adjustment method.	1. Width: Adjust the width to just disappear the flag of both left and right side with [WID]. 2. E/W : Adjust the vertical bar of both left and right end to the straightline it with [DPC]. 3. Trapezium : Compensate the trapeqoid distortion with [TRAP]. 4. Width : Adjust the width again. (Turn the direction of CPT to the east or the west when adjusting. adjust the amount offsetting if it is not possible to do.)
Item. [Horizontal, synchronous VR adjustment] (R4450)	
SETTING.	UNIT ADJUSTMENT
Adjustment method.	Supply +12V to the terminal HVCC. Adjust the frequency of the terminal Q420#24 with a frequency counter to <u>31.36±0.15kHz.</u>
Note: Connect power supply GND with GND of all connectors when you supply the power supply.	

CIRCUIT CHECK

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

Refer to table-1 for high voltage (B).
(See SETTING & ADJUSTING DATA on page 16)

4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CHAPTER 2 SPECIFIC INFORMATION

SETTING & ADJUSTING DATA

【SAFETY INSTRUCTIONS】

		29"	33"
HIGH VOLTAGE AT ZERO BEAM:	(A)	32.5 kV	32.5 kV
MAX HIGH VOLTAGE:	(B)	33.0 kV	33.0 kV
AC VOLTAGE	(C)	220~240 V	220~240 V

Table-1

【SERVICE MODE】

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Adjustment	Preset	Data	Item	Adjustment	Preset	Data
RCUT	R CUTOFF (B/W)	40H	←	CNR	E-W CORNER (50Hz)	02H	←
GCUT	G CUTOFF (B/W)	40H	←	TRAP	TRAPEZIUM ↓	0DH	←
BCUT	B CUTOFF (B/W)	40H	←	HCP	H-COMPENSATION ↓	00H	←
RDRV	R DRIVE	40H	←	VFC	V-S CORRECTION ↓	0FH	←
BDRV	B DRIVE	40H	←	NVLI	V-LINEARITY (60Hz)	00H	←
CNTX	SUB CONTRAST MAX	7FH	←	NVSC	V-S CORRECTION ↓	00H	←
BRTC	SUB BRIGHT CEN	80H	←	NVPS	V-SHIFT ↓	00H	←
COLC	SUB COLOR CEN NTSC	15H	←	NVCP	V-COMPENSATION ↓	00H	←
TNTC	SUB TINT CEN	48H	←	NWID	PICTURE WIDTH ↓	00H	←
COLP	SUB COLOR CEN PAL	39H	←	NPAR	E-W PARABORA ↓	01H	←
COLS	SUB COLOR CEN SECAM	F0H	←	SCNR	E-W CORNER 16:9 (DEF)	FEH	←
SCNT	SUB CONTRAST	19H	←	NTRP	TRAPEZIUM (60Hz)	00H	←
SCOL	SUB COLOR	07H	←	NHCP	H-COMPENSATION ↓	00H	←
HPS	H-POSITION (DIFF)	07H	←	NVFC	V-S CORRECTION ↓	00H	←
HITS	PICTURE HEIGHT (DIFF)	03H	←	SHIT	HIT for 16:9 (DEF)	DCH	←
NVPO	V-POSITION (60Hz DEF)	FFH	←	SLIN	V-LINEARITY 16:9 (DEF)	FEH	←
HVPU	H, V-POSITION (MSB)	00H	←	SVSC	V-S CORRECTION 16:9 (DEF)	FBH	←
VLIN	V-LINEARITY (50Hz)	0BH	←	SFT	V-SHIFT 16:9 (DEF)	00H	←
VSC	V-S CORRECTION ↓	0BH	←	SEWP	E-W PARABORA 16:9 (DEF)	E9H	←
VPS	V-SHIFT ↓	0FH	←	BELL	SECAM BELL FILTER	80H	←
VCP	V-COMPENSATION ↓	05H	←	SRV	SECAM R-Y	08H	←
WID	PICTURE WIDTH ↓	28H	←	SBY	SECAM B-Y	08H	←
PARA	E-W PARABORA ↓	2FH	←				

Table-2

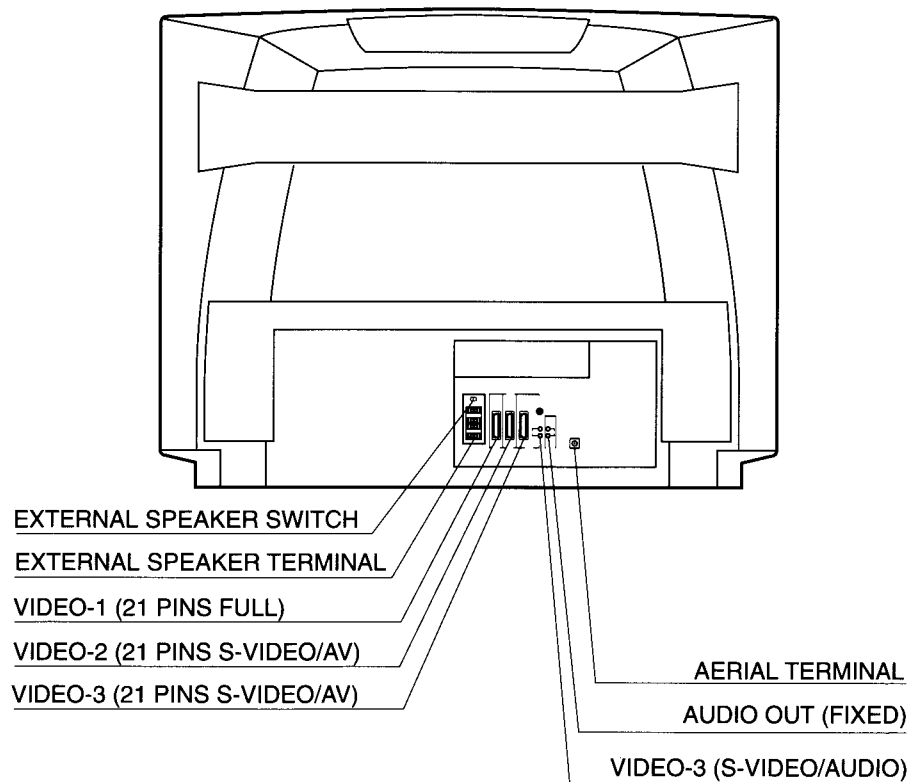
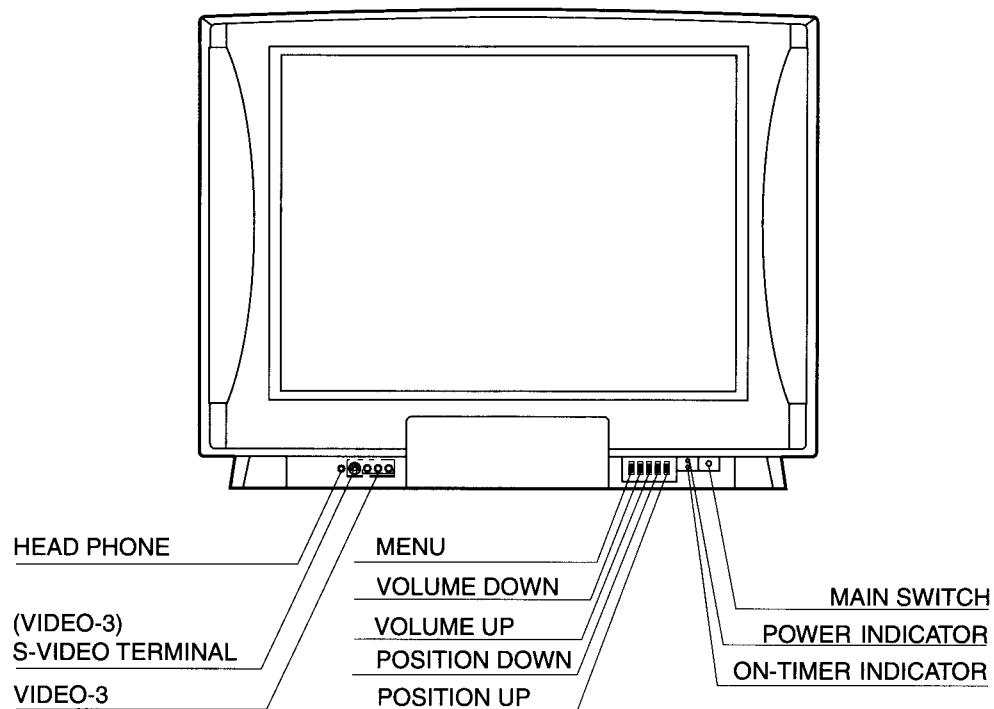
【DESIGN MODE】

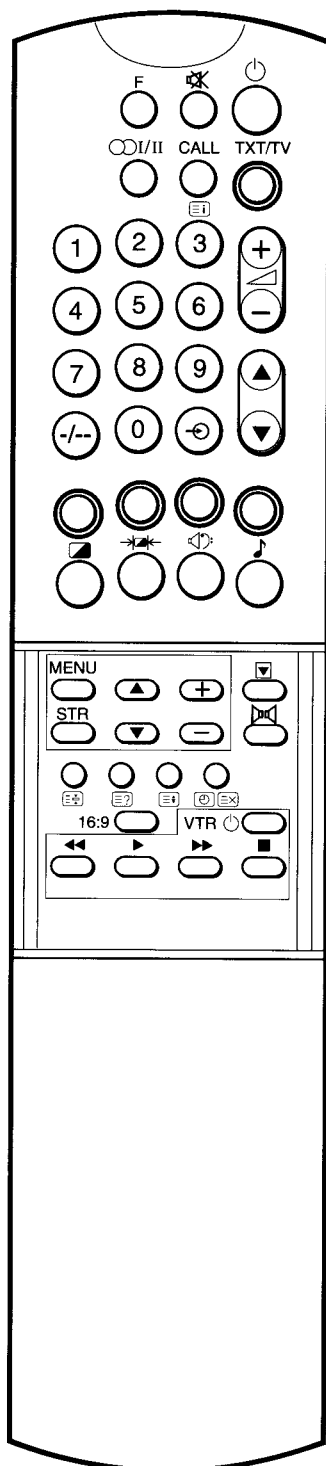
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

Item	Name of adjustment		Data	Remarks
		Preset Data		
* There are no adjustment mode in the DESIGN MODE.				

Table-3

LOCATION OF CONTROLS

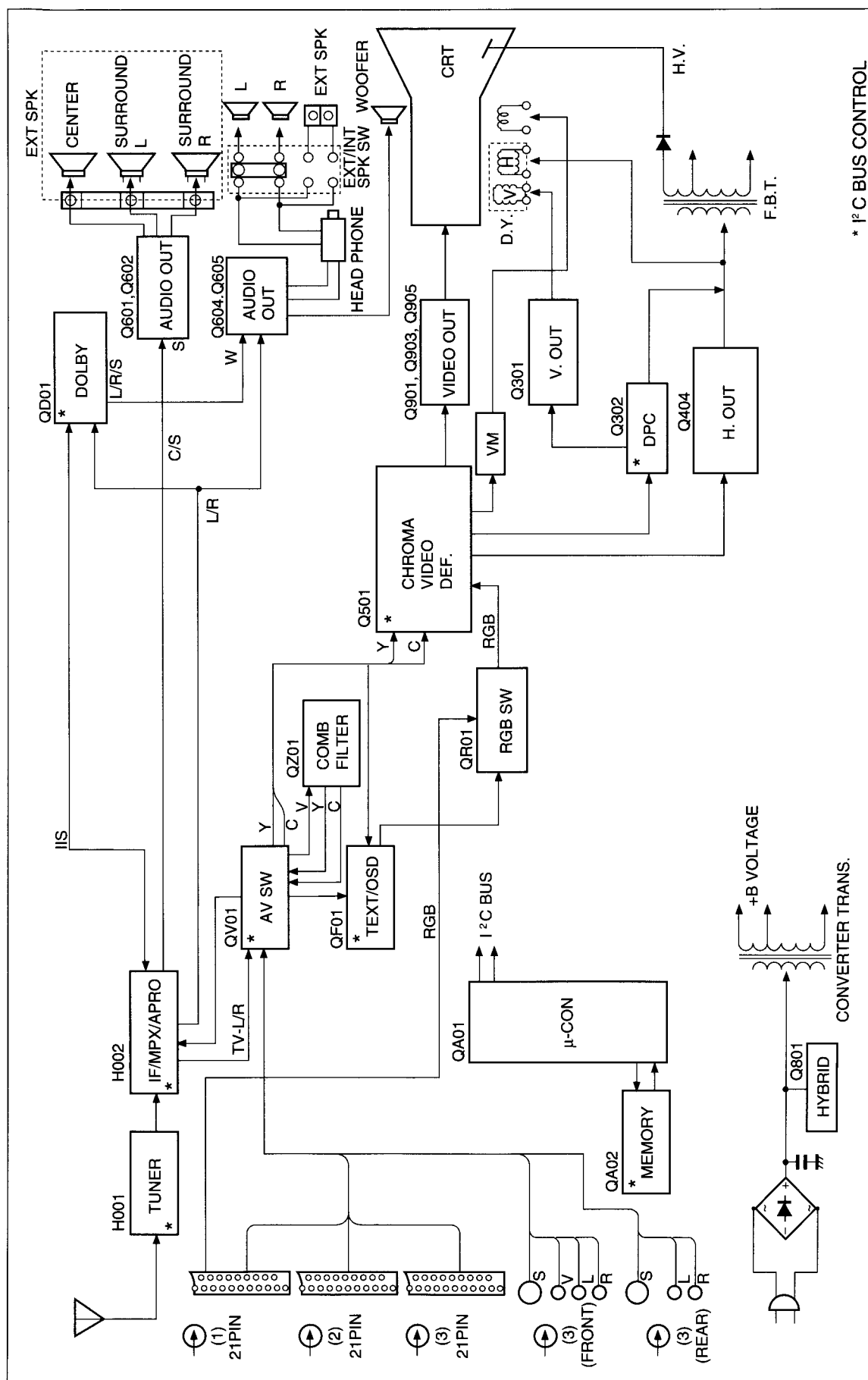




KEY ASSIGNMENT

- ⏻ ON/STAND-BY
- 🔇 Sound mute
- F (Quick/advanced operation)
- CALL (On-screen call)/E1 (index, initial) TELETEXT MODE
- 🖼️ PICTURE MENU
- 🔊 SOUND MENU
- I/II <TV MODE> STEREO BILINGUAL
- 1~9, 0 TEN KEY
- / - 1 or 2 place
- 📺 VIDEO INPUT (EXTERNAL INPUT SOURCE SW.)
- 🔊 VOLUME
- + ... LEVEL PLUS (VOLUME, MENU)
- LEVEL MINUS (VOLUME, MENU)
- ▲ UP (POS., CH., TEXT PAGE)
- ▼ DOWN (POS., CH., TEXT PAGE)
- TXT/TV ... TEXT, MIX, TV MODE SW.
- 🔒 HOLD
- E2 <TEXT MODE> REVEAL / CONCEAL
- E3 <TEXT MODE> F-T-B (FULL, TOP, BOTTOM)
- E4/E5 TIME DISPLAY (TV MODE) TEXT CLEAR (TEXT MODE)
- FLOF COLOUR KEY (4 key used) Red/Green/Yellow/Blue
- 🔊 Super woofer
- 🖼️ Selectable picture
- MENU TUNING & OTHER MENU
- STR Store
- 🔍 / 🔍 Menu select
- 🔍 / 🔍 Level down/up
- 16:9 PIC SIZE (Picture size select)
- VTR control
- ⏻ Power on/standby
- ▶ Play
- Stop
- ◀ Rewind
- ▶▶ Fast forward
- 🔊 DSP Surround

CIRCUIT BLOCK DIAGRAM



* I²C BUS CONTROL

CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols " Δ " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with * mark is no longer available after the end of the production.

Model: 2998DG/3398DG

Capacitors CD : Ceramic Disk PF : Plastic Film EL : Electrolytic
Resistors CF : Carbon Film CC : Carbon Composition MF : Metal Film
 OMF : Oxide Metal Film VR : Variable Resistor FR : Fusible Resistor
(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/6W unless otherwise noted.)

SPECIFIC INFORMATION

Location No.	Part No.	Description
CAPACITORS		
C101	24763221	EL, 220 μ F, $\pm 20\%$, 16V
C102	24763221	EL, 220 μ F, $\pm 20\%$, 16V
C103	24232103	CD, 0.01 μ F, $+80\%$, -20%
C104	24793470	EL, 47 μ F, $\pm 20\%$, 10V
C105	24212102	CD, 1000pF, $\pm 10\%$
C106	24797100	EL, 10 μ F, $\pm 20\%$, 50V
C107	24763221	EL, 220 μ F, $\pm 20\%$, 16V
C108	24793101	EL, 100 μ F, $\pm 20\%$, 10V
C110	24797479	EL, 4.7 μ F, $\pm 20\%$, 50V
C111	24797229	EL, 2.2 μ F, $\pm 20\%$, 50V
C117	24232103	CD, 0.01 μ F, $+80\%$, -20%
C118	24232103	CD, 0.01 μ F, $+80\%$, -20%
C201	24669100	EL, 10 μ F, $\pm 20\%$, 50V
C203	24538104	PF, 0.1 μ F
C204	24669010	EL, 1 μ F, $\pm 20\%$, 50V
C205	24669229	EL, 2.2 μ F, $\pm 20\%$, 50V
C206	24797220	EL, 22 μ F, $\pm 20\%$, 50V
C207	24781100	Chip, 10pF, $\pm 0.5\text{pF}\%$, SL
C208	24781100	Chip, 10pF, $\pm 0.5\text{pF}\%$, SL
C209	24781100	Chip, 10pF, $\pm 0.5\text{pF}\%$, SL
C212	24794100	EL, 10 μ F, $\pm 20\%$, 16V
C214	24591334	PF, 0.33 μ F
C215	24781101	Chip, 100pF, SL
C216	24781101	Chip, 100pF, SL
C218	24781390	Chip, 39pF, SL
C230	24763221	EL, 220 μ F, $\pm 20\%$, 16V
C273	24206229	EL, 2.2 μ F, $\pm 20\%$, 50V
C303	24214471	CD, 470pF, $\pm 10\%$, 500V
C304	24082049	PF, 0.047 μ F, 100V
C305	24617912	EL, 2.2 μ F, $\pm 10\%$, 50V
C306	24073059	EL, 3300 μ F, $\pm 20\%$, 25V (2998DG)
C306	24073060	EL, 4700 μ F, $\pm 20\%$, 25V (3398DG)
C307	24793101	EL, 100 μ F, $\pm 20\%$, 10V
C308	24668221	EL, 220 μ F, $\pm 20\%$, 35V
C309	24668101	EL, 100 μ F, $\pm 20\%$, 35V
C310	24796222	EL, 2200 μ F, $\pm 20\%$, 35V
C311	24567473	PF, 0.047 μ F
C312	24591273	PF, 0.027 μ F

Location No.	Part No.	Description
C313	24082058	PF, 0.27 μ F, 100V
C315	24212222	CD, 2200pF, $\pm 10\%$
C315	24797229	EL, 2.2 μ F, $\pm 20\%$, 50V
C316	24591563	PF, 0.056 μ F (2998DG)
C318	24666101	EL, 100 μ F, $\pm 20\%$, 16V (2998DG)
C318	24617956	EL, 120 μ F, $\pm 20\%$ (3398DG)
C319	24591103	PF, 0.01 μ F
C321	24591203	PF, 0.02 μ F
C322	24617912	EL, 2.2 μ F, $\pm 10\%$, 50V (2998DG)
C323	24567224	PF, 0.22 μ F
C324	24567683	PF, 0.068 μ F
C325	24617912	EL, 2.2 μ F, $\pm 10\%$, 50V (3398DG)
C327	24617787	EL, 470 μ F, $\pm 20\%$, 16V
C328	24232103	CD, 0.01 μ F, $+80\%$, -20%
C341	24567104	PF, 0.1 μ F
C366	24082049	PF, 0.047 μ F, 100V
C370	24794101	EL, 100 μ F, $\pm 20\%$, 16V
C371	24794100	EL, 10 μ F, $\pm 20\%$, 16V
C401	24538104	PF, 0.1 μ F
C403	24591103	PF, 0.01 μ F
C404	24797229	EL, 2.2 μ F, $\pm 20\%$, 50V
C410	24092341	CD, 470pF, $\pm 10\%$, 2kV
C413	24214332	CD, 3300pF, $\pm 10\%$, 500V
C416	24668101	EL, 100 μ F, $\pm 20\%$, 35V
C417	24214391	CD, 390pF, $\pm 10\%$, 500V
C419	24212102	CD, 1000pF, $\pm 10\%$
C420	24794101	EL, 100 μ F, $\pm 20\%$, 16V
C421	24567104	PF, 0.1 μ F
C423	24829333	PF, 0.033 μ F, 400V (2998DG)
C423	24829473	PF, 0.047 μ F, 400V (3398DG)
C430	24814103	Chip, 0.01 μ F, $+80\%$, -20%
C431	24232103	CD, 0.01 μ F, $+80\%$, -20%
C431	24763102	EL, 1000 μ F, $\pm 20\%$, 16V
C439	24082829	PF, 2700pF, $\pm 3\%$, 1800V (2998DG)
C439	24082830	PF, 3000pF, $\pm 3\%$, 1800V (3398DG)
C440	24082830	PF, 3000pF, $\pm 3\%$, 1800V
C442	24082643	PF, 0.18 μ F, 400V (2998DG)
C442	24082639	PF, 0.12 μ F, 400V (3398DG)

Location No.	Part No.	Description
C443	24082643	PF, 0.18 μ F, 400V (2998DG)
C443	24082639	PF, 0.12 μ F, 400V (3398DG)
C444	24082828	PF, 2400pF, $\pm$ 3%, 1800V (2998DG)
C444	24082827	PF, 2200pF, $\pm$ 3%, 1800V (3398DG)
C445	24828473	PF, 0.047 μ F, 200V
C446	24679330	EL, 33 μ F, $\pm$ 20%, 250V
C448	24640908	EL, 33 μ F, $\pm$ 20%, 160V
C460	24796331	EL, 330 μ F, $\pm$ 20%, 35V
C461	24082828	PF, 2400pF, $\pm$ 3%, 1800V (2998DG)
C461	24082827	PF, 2200pF, $\pm$ 3%, 1800V (3398DG)
C462	24666222	EL, 2200 μ F, $\pm$ 20%, 16V
C463	24212392	CD, 3900pF, $\pm$ 10%
C464	24700220	EL, 22 μ F, $\pm$ 20%, 250V (2998DG)
C464	24640871	EL, 4.7 μ F, $\pm$ 20%, 100V (3398DG)
C465	24591683	PF, 0.068 μ F (3398DG)
C466	24820682	PF, 0.0068 μ F, 630V
C470	24794220	EL, 22 μ F, $\pm$ 20%, 16V
C472	24567474	PF, 0.47 μ F
C473	24669010	EL, 1 μ F, $\pm$ 20%, 50V
C475	24095887	PF, 0.01 μ F, $\pm$ 3%, 630V (2998DG)
C477	24591104	PF, 0.1 μ F (2998DG)
C477	24591393	PF, 0.039 μ F (3398DG)
C478	24567154	PF, 0.15 μ F (2998DG)
C478	24567224	PF, 0.22 μ F (3398DG)
C479	24214471	CD, 470pF, $\pm$ 10%, 500V
C481	24567474	PF, 0.47 μ F
C484	24082254	PF, 1500pF, 100V
C491	24082749	PF, 1.5 μ F, 250V (2998DG)
C492	24082645	PF, 0.47 μ F, 400V (2998DG)
C494	24082644	PF, 0.2 μ F, 400V (2998DG)
C495	24092343	CD, 680pF, $\pm$ 10%, 2kV
C496	24092343	CD, 680pF, $\pm$ 10%, 2kV
C501	24781101	Chip, 100pF, SL
C502	24814103	Chip, 0.01 μ F, +80%, -20%
C503	24763221	EL, 220 μ F, $\pm$ 20%, 16V
C504	24591222	PF, 2200pF
C505	24774120	Chip, 12pF, CH
C507	24774120	Chip, 12pF, CH
C508	24669100	EL, 10 μ F, $\pm$ 20%, 50V
C509	24763101	EL, 100 μ F, $\pm$ 20%, 16V
C510	24763101	EL, 100 μ F, $\pm$ 20%, 16V
C511	24814103	Chip, 0.01 μ F, +80%, -20%
C512	24206228	EL, 0.22 μ F, $\pm$ 20%, 50V
C513	24814103	Chip, 0.01 μ F, +80%, -20%
C514	24538104	PF, 0.1 μ F
C515	24538104	PF, 0.1 μ F
C516	24781102	Chip, 1000pF, SL
C517	24774010	Chip, 1pF, $\pm$ 0.25pF, CH
C519	24774010	Chip, 1pF, $\pm$ 0.25pF, CH
C520	24781102	Chip, 1000pF, SL
C521	24781102	Chip, 1000pF, SL
C522	24781470	Chip, 47pF, SL
C523	24781470	Chip, 47pF, SL
C524	24781122	Chip, 1200pF, SL
C525	24774181	Chip, 180pF, CH
C526	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
C526	24436101	CD, 100pF

Location No.	Part No.	Description
C613	24794471	EL, 470 μ F, $\pm$ 20%, 16V
C641	24206010	EL, 1 μ F, $\pm$ 20%, 50V
C644	24797010	EL, 1 μ F, $\pm$ 20%, 50V
C645	24795470	EL, 47 μ F, $\pm$ 20%, 25V
C646	24795470	EL, 47 μ F, $\pm$ 20%, 25V
C647	24591102	PF, 1000pF
C648	24590682	PF, 6800pF
C649	24797229	EL, 2.2 μ F, $\pm$ 20%, 50V
C650	24796102	EL, 1000 μ F, $\pm$ 20%, 35V
C651	24668471	EL, 470 μ F, $\pm$ 20%, 35V
C652	24668471	EL, 470 μ F, $\pm$ 20%, 35V
C653	24795470	EL, 47 μ F, $\pm$ 20%, 25V
C654	24591124	PF, 0.12 μ F
C655	24591124	PF, 0.12 μ F
C656	24232103	CD, 0.01 μ F, +80%, -20%
C657	24797229	EL, 2.2 μ F, $\pm$ 20%, 50V
C660	24797229	EL, 2.2 μ F, $\pm$ 20%, 50V
C661	24797478	EL, 0.47 μ F, $\pm$ 20%, 50V
C662	24794100	EL, 10 μ F, $\pm$ 20%, 16V
C663	24797229	EL, 2.2 μ F, $\pm$ 20%, 50V
C664	24203100	EL, 10 μ F, $\pm$ 20%, 16V
C665	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
C666	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
C667	24212102	CD, 1000pF, $\pm$ 10%
C668	24212102	CD, 1000pF, $\pm$ 10%
C669	24797330	EL, 33 μ F, $\pm$ 20%, 50V
C670	24781102	Chip, 1000pF, SL
C670	24797330	EL, 33 μ F, $\pm$ 20%, 50V
C671	24797010	EL, 1 μ F, $\pm$ 20%, 50V
C671	24814103	Chip, 0.01 μ F, +80%, -20%
C672	24814103	Chip, 0.01 μ F, +80%, -20%
C673	24781102	Chip, 1000pF, SL
C673	24797010	EL, 1 μ F, $\pm$ 20%, 50V
C674	24781102	Chip, 1000pF, SL
C674	24797010	EL, 1 μ F, $\pm$ 20%, 50V
C675	24781102	Chip, 1000pF, SL
C675	24795470	EL, 47 μ F, $\pm$ 20%, 25V
C676	24781102	Chip, 1000pF, SL
C676	24797479	EL, 4.7 μ F, $\pm$ 20%, 50V
C677	24590102	PF, 1000pF
C677	24781102	Chip, 1000pF, SL
C678	24590102	PF, 1000pF
C678	24781102	Chip, 1000pF, SL
C679	24538104	PF, 0.1 μ F
C679	24781102	Chip, 1000pF, SL
C680	24668102	EL, 1000 μ F, $\pm$ 20%, 35V
C681	24668471	EL, 470 μ F, $\pm$ 20%, 35V
C681	24781102	Chip, 1000pF, SL
C682	24668471	EL, 470 μ F, $\pm$ 20%, 35V
C682	24781102	Chip, 1000pF, SL
C683	24668102	EL, 1000 μ F, $\pm$ 20%, 35V
C685	24590124	PF, 0.12 μ F
C685	24814103	Chip, 0.01 μ F, +80%, -20%
C686	24590124	PF, 0.12 μ F
C687	24232103	CD, 0.01 μ F, +80%, -20%
C688	24203220	EL, 22 μ F, $\pm$ 20%, 16V
C689	24590124	PF, 0.12 μ F
C689	24814103	Chip, 0.01 μ F, +80%, -20%
C704	24232103	CD, 0.01 μ F, +80%, -20%
C705	24797229	EL, 2.2 μ F, $\pm$ 20%, 50V
C707	24794470	EL, 47 μ F, $\pm$ 20%, 16V
C712	24666470	EL, 47 μ F, $\pm$ 20%, 16V
C713	24790100	EL, 10 μ F, $\pm$ 20%, 160V
C714	24436101	CD, 100pF

Location No.	Part No.	Description
C715	24214472	CD, 4700pF, $\pm 10\%$, 500V
C716	24436101	CD, 100pF
C717	24214472	CD, 4700pF, $\pm 10\%$, 500V
C718	24794470	EL, 47 μ F, $\pm 20\%$, 16V
C719	24435151	CD, 150pF, 500V, SL
C720	24790100	EL, 10 μ F, $\pm 20\%$, 160V
C721	24794470	EL, 47 μ F, $\pm 20\%$, 16V
△C801	24082927	PF, 0.22 μ F, $\pm 20\%$, AC275V
C805	24092281	CD, 4700pF, $\pm 20\%$, AC250V
C806	24092281	CD, 4700pF, $\pm 20\%$, AC250V
C808	24667331	EL, 330 μ F, $\pm 20\%$, 25V
C809	24214471	CD, 470pF, $\pm 10\%$, 500V
C810	24086873	EL, 330 μ F, $\pm 20\%$, 400V
C810	24763102	EL, 1000 μ F, $\pm 20\%$, 16V
△C813	24092557	CD, 220pF, $\pm 20\%$, AC250V
△C814	24092557	CD, 220pF, $\pm 20\%$, AC250V
C816	24669221	EL, 220 μ F, $\pm 20\%$, 50V
C817	24092341	CD, 470pF, $\pm 10\%$, 2kV
C818	24095931	PF, 2200pF, 1250V
C819	24676220	EL, 22 μ F, $\pm 20\%$, 100V
C820	24092343	CD, 680pF, $\pm 10\%$, 2kV
C821	24214471	CD, 470pF, $\pm 10\%$, 500V
C822	24538474	PF, 0.47 μ F
C829	24590182	PF, 1800pF
C833	24669100	EL, 10 μ F, $\pm 20\%$, 50V
C833	24794470	EL, 47 μ F, $\pm 20\%$, 16V
C834	24794470	EL, 47 μ F, $\pm 20\%$, 16V
C841	24669100	EL, 10 μ F, $\pm 20\%$, 50V
C842	24669100	EL, 10 μ F, $\pm 20\%$, 50V
C843	24538104	PF, 0.1 μ F
C846	24538104	PF, 0.1 μ F
C884	24086916	EL, 330 μ F, $\pm 20\%$, 160V
△C885	24214471	CD, 470pF, $\pm 10\%$, 500V
△C886	24666332	EL, 3300 μ F, $\pm 20\%$, 16V
C887	24214471	CD, 470pF, $\pm 10\%$, 500V
C892	24667222	EL, 2200 μ F, $\pm 20\%$, 25V
C893	24092337	CD, 220pF, $\pm 10\%$, 2kV
C894	24668332	EL, 3300 μ F, $\pm 20\%$, 35V
C895	24669470	EL, 47 μ F, $\pm 20\%$, 50V
C896	24214471	CD, 470pF, $\pm 10\%$, 500V
C897	24666332	EL, 3300 μ F, $\pm 20\%$, 16V
C898	24591122	PF, 1200pF
C899	24214471	CD, 470pF, $\pm 10\%$, 500V
C902	24092353	CD, 4700pF, $\pm 10\%$, 2kV
C904	24436471	CD, 470pF
C905	24436471	CD, 470pF
C907	24436471	CD, 470pF
C909	24679220	EL, 22 μ F, $\pm 20\%$, 250V
C910	24797478	EL, 0.47 μ F, $\pm 20\%$, 50V
C911	24203100	EL, 10 μ F, $\pm 20\%$, 16V
C912	24794102	EL, 1000 μ F, $\pm 20\%$, 16V
C913	24763102	EL, 1000 μ F, $\pm 20\%$, 16V
C914	24212103	CD, 0.01 μ F, $\pm 10\%$
C915	24092398	CD, 0.1 μ F, +80%, -20%, 25V
C920	24591104	PF, 0.1 μ F
C921	24591104	PF, 0.1 μ F
C930	24214101	CD, 100pF, $\pm 10\%$, 500V
C931	24214101	CD, 100pF, $\pm 10\%$, 500V
C940	24436390	CD, 39pF
C4031	24591562	PF, 5600pF
C4041	24206229	EL, 2.2 μ F, $\pm 20\%$, 50V
C4301	24206010	EL, 1 μ F, $\pm 20\%$, 50V
C4303	24591433	PF, 0.043 μ F
C4304	24591153	PF, 0.015 μ F

Location No.	Part No.	Description
C4305	24763101	EL, 100 μ F, $\pm 20\%$, 16V
C4306	24232103	CD, 0.01 μ F, +80%, -20%
C4307	24232103	CD, 0.01 μ F, +80%, -20%
C4311	24763471	EL, 470 μ F, $\pm 20\%$, 16V
C4401	24232103	CD, 0.01 μ F, +80%, -20%
C4402	24232103	CD, 0.01 μ F, +80%, -20%
C4403	24501561	PF, 560pF
C4404	24501132	PF, 0.0013 μ F
C4405	24797479	EL, 4.7 μ F, $\pm 20\%$, 50V
C4406	24232103	CD, 0.01 μ F, +80%, -20%
C4408	24206229	EL, 2.2 μ F, $\pm 20\%$, 50V
C4412	24501132	PF, 0.0013 μ F
C4413	24501102	PF, 0.001 μ F
C4414	24232103	CD, 0.01 μ F, +80%, -20%
C4415	24567474	PF, 0.47 μ F
C4416	24501161	PF, 160pF
C4417	24591332	PF, 3300pF
C4421	24353330	CD, 33pF, CH
C4466	24820562	PF, 0.0056 μ F, 630V
CA13	24436101	CD, 100pF
CA14	24232103	CD, 0.01 μ F, +80%, -20%
CA30	24436101	CD, 100pF
CA33	24232103	CD, 0.01 μ F, +80%, -20%
CA42	24794100	EL, 10 μ F, $\pm 20\%$, 16V
CA43	24232103	CD, 0.01 μ F, +80%, -20%
CA44	24232103	CD, 0.01 μ F, +80%, -20%
CA68	24794100	EL, 10 μ F, $\pm 20\%$, 16V
CA69	24232103	CD, 0.01 μ F, +80%, -20%
CB01	24794470	EL, 47 μ F, $\pm 20\%$, 16V
CB90	24232103	CD, 0.01 μ F, +80%, -20%
CC01	24232103	CD, 0.01 μ F, +80%, -20%
CC08	24781102	Chip, 1000pF, SL
CC09	24815102	Chip, 0.001 μ F, $\pm 10\%$
CC10	24781101	Chip, 100pF, SL
CC10	24815102	Chip, 0.001 μ F, $\pm 10\%$
CC20	24781102	Chip, 1000pF, SL
CC21	24781470	Chip, 47pF, SL
CC22	24781470	Chip, 47pF, SL
CD01	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD02	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD03	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD04	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD05	24781330	Chip, 33pF, SL
CD06	24781330	Chip, 33pF, SL
CD20	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD21	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD22	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD23	24793221	EL, 220 μ F, $\pm 20\%$, 10V
CD24	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CD25	24793221	EL, 220 μ F, $\pm 20\%$, 10V
CD30	24794100	EL, 10 μ F, $\pm 20\%$, 16V
CD31	24794220	EL, 22 μ F, $\pm 20\%$, 16V
CD32	24797010	EL, 1 μ F, $\pm 20\%$, 50V
CD33	24590823	PF, 0.082 μ F
CD34	24590104	PF, 0.1 μ F
CD35	24591124	PF, 0.12 μ F
CD36	24781102	Chip, 1000pF, SL
CD37	24794100	EL, 10 μ F, $\pm 20\%$, 16V
CD38	24797010	EL, 1 μ F, $\pm 20\%$, 50V
CD39	24797010	EL, 1 μ F, $\pm 20\%$, 50V
CD40	24797010	EL, 1 μ F, $\pm 20\%$, 50V
CD41	24814103	Chip, 0.01 μ F, +80%, -20%
CD42	24794101	EL, 100 μ F, $\pm 20\%$, 16V
CF03	24567104	PF, 0.1 μ F

Location No.	Part No.	Description
CF04	24766101	EL, 100 μ F, $\pm$ 20%, 50V
CF05	24766101	EL, 100 μ F, $\pm$ 20%, 50V
CF06	24353220	CD, 22pF, CH
CF07	24353220	CD, 22pF, CH
CF08	24567104	PF, 0.1 μ F
CF09	24567104	PF, 0.1 μ F
CF10	24206100	EL, 10 μ F, $\pm$ 20%, 50V
CF11	24567104	PF, 0.1 μ F
CF12	24232103	CD, 0.01 μ F, +80%, -20%
CF14	24232103	CD, 0.01 μ F, +80%, -20%
CF16	24567224	PF, 0.22 μ F
CQ01	24781102	Chip, 1000pF, SL
CQ02	24781820	Chip, 82pF, SL
CQ03	24781102	Chip, 1000pF, SL
CQ04	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CQ05	24591563	PF, 0.056 μ F
CQ07	24591203	PF, 0.02 μ F
CQ08	24567683	PF, 0.068 μ F
CQ09	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CQ10	24591223	PF, 0.022 μ F
CQ11	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CQ12	24781820	Chip, 82pF, SL
CQ13	24669010	EL, 1 μ F, $\pm$ 20%, 50V
CQ14	24669010	EL, 1 μ F, $\pm$ 20%, 50V
CQ15	24763101	EL, 100 μ F, $\pm$ 20%, 16V
CQ16	24814103	Chip, 0.01 μ F, +80%, -20%
CQ17	24774150	Chip, 15pF, CH
CQ18	24781820	Chip, 82pF, SL
CQ19	24590103	PF, 0.01 μ F
CQ20	24567104	PF, 0.1 μ F
CQ21	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CQ22	24814103	Chip, 0.01 μ F, +80%, -20%
CQ23	24567104	PF, 0.1 μ F
CQ24	24567104	PF, 0.1 μ F
CQ25	24797100	EL, 10 μ F, $\pm$ 20%, 50V
CQ26	24567104	PF, 0.1 μ F
CQ27	24567104	PF, 0.1 μ F
CQ28	24797478	EL, 0.47 μ F, $\pm$ 20%, 50V
CQ29	24794101	EL, 100 μ F, $\pm$ 20%, 16V
CQ30	24814103	Chip, 0.01 μ F, +80%, -20%
CQ31	24797478	EL, 0.47 μ F, $\pm$ 20%, 50V
CQ32	24590103	PF, 0.01 μ F
CQ33	24567104	PF, 0.1 μ F
CQ34	24567104	PF, 0.1 μ F
CQ35	24206478	EL, 0.47 μ F, $\pm$ 20%, 50V
CQ36	24206478	EL, 0.47 μ F, $\pm$ 20%, 50V
CQ37	24669010	EL, 1 μ F, $\pm$ 20%, 50V
CQ38	24669010	EL, 1 μ F, $\pm$ 20%, 50V
CQ39	24669010	EL, 1 μ F, $\pm$ 20%, 50V
CQ40	24781820	Chip, 82pF, SL
CQ41	24781090	Chip, 9pF, $\pm$ 0.5pF, SL
CQ42	24781090	Chip, 9pF, $\pm$ 0.5pF, SL
CQ43	24781090	Chip, 9pF, $\pm$ 0.5pF, SL
CQ45	24781102	Chip, 1000pF, SL
CQ46	24781102	Chip, 1000pF, SL
CR01	24567104	PF, 0.1 μ F
CR02	24567104	PF, 0.1 μ F
CR03	24567104	PF, 0.1 μ F
CR04	24567104	PF, 0.1 μ F
CR05	24567104	PF, 0.1 μ F
CR06	24567104	PF, 0.1 μ F
CR07	24814103	Chip, 0.01 μ F, +80%, -20%
CR08	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CR09	24814103	Chip, 0.01 μ F, +80%, -20%

Location No.	Part No.	Description
CR12	24567104	PF, 0.1 μ F
CR13	24567104	PF, 0.1 μ F
CR14	24567104	PF, 0.1 μ F
CS01	24085944	EL, 2.2 μ F, $\pm$ 20%, 50V, Non-Polar
CS02	24085944	EL, 2.2 μ F, $\pm$ 20%, 50V, Non-Polar
CS03	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CS04	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CS05	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CS06	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CS07	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CS08	24206229	EL, 2.2 μ F, $\pm$ 20%, 50V
CS09	24206010	EL, 1 μ F, $\pm$ 20%, 50V
CS12	24781102	Chip, 1000pF, SL
CS13	24781102	Chip, 1000pF, SL
CS14	24206100	EL, 10 μ F, $\pm$ 20%, 50V
CS15	24206100	EL, 10 μ F, $\pm$ 20%, 50V
CS17	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CS18	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CS19	24206478	EL, 0.47 μ F, $\pm$ 20%, 50V
CS22	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CS23	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CV01	24567103	PF, 0.01 μ F
CV02	24085970	EL, 10 μ F, $\pm$ 20%, 16V, Non-Polar
CV03	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CV04	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CV05	24814103	Chip, 0.01 μ F, +80%, -20%
CV06	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CV08	24763102	EL, 1000 μ F, $\pm$ 20%, 16V
CV09	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CV10	24085970	EL, 10 μ F, $\pm$ 20%, 16V, Non-Polar
CV11	24781331	Chip, 330pF, SL
CV12	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
CV13	24814103	Chip, 0.01 μ F, +80%, -20%
CV14	24781102	Chip, 1000pF, SL
CV15	24781102	Chip, 1000pF, SL
CV16	24781102	Chip, 1000pF, SL
CV17	24781102	Chip, 1000pF, SL
CV18	24781102	Chip, 1000pF, SL
CV19	24781102	Chip, 1000pF, SL
CV20	24781430	Chip, 43pF, SL
CV23	24203101	EL, 100 μ F, $\pm$ 20%, 16V
CV24	24814103	Chip, 0.01 μ F, +80%, -20%
CV25	24763471	EL, 470 μ F, $\pm$ 20%, 16V
CV31	24781102	Chip, 1000pF, SL
CV34	24781102	Chip, 1000pF, SL
CV35	24814103	Chip, 0.01 μ F, +80%, -20%
CV37	24781102	Chip, 1000pF, SL
CV39	24203101	EL, 100 μ F, $\pm$ 20%, 16V
CV40	24814103	Chip, 0.01 μ F, +80%, -20%
CV46	24212332	CD, 3300pF, $\pm$ 10%
CV47	24212332	CD, 3300pF, $\pm$ 10%
CV48	24212102	CD, 1000pF, $\pm$ 10%
CV65	24203101	EL, 100 μ F, $\pm$ 20%, 16V
CV66	24203101	EL, 100 μ F, $\pm$ 20%, 16V
CV67	24763471	EL, 470 μ F, $\pm$ 20%, 16V
CV68	24763471	EL, 470 μ F, $\pm$ 20%, 16V
CV78	24781330	Chip, 33pF, SL
CX101	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX102	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CX103	24092441	Chip, 1 μ F, +80%, -20%, 16V

SPECIFIC INFORMATIONS

Location No.	Part No.	Description
CX104	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX105	24774330	Chip, 33pF, CH
CX106	24774220	Chip, 22pF, CH
CX107	24774560	Chip, 56pF, CH
CX108	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX109	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX111	24092294	Chip, 0.33 μ F, +80%, -20%, 16V
CX112	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX113	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX114	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX115	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX116	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX117	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX118	24092732	Chip, 3.3 μ F, $\pm$ 10%, 6.3V
CX119	24092732	Chip, 3.3 μ F, $\pm$ 10%, 6.3V
CX120	24092732	Chip, 3.3 μ F, $\pm$ 10%, 6.3V
CX121	24774330	Chip, 33pF, CH
CX122	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX123	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX124	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX125	24794220	EL, 22 μ F, $\pm$ 20%, 16V
CX126	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX127	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX128	24092441	Chip, 1 μ F, +80%, -20%, 16V
CX129	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX141	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX142	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX143	24085981	EL, 10 μ F, $\pm$ 20%, 16V, Non-Polar
CX144	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CX145	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX146	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX147	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX148	24774101	Chip, 100pF, CH
CX149	24774470	Chip, 47pF, CH
CX150	24774271	Chip, 270pF, CH
CX151	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX152	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX153	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX154	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX155	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX156	24794220	EL, 22 μ F, $\pm$ 20%, 16V
CX157	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX158	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX159	24092441	Chip, 1 μ F, +80%, -20%, 16V
CX160	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX161	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX162	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX163	24085981	EL, 10 μ F, $\pm$ 20%, 16V, Non-Polar
CX164	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CX165	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX166	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX167	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX168	24774101	Chip, 100pF, CH
CX169	24774470	Chip, 47pF, CH
CX170	24774271	Chip, 270pF, CH
CX171	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX172	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX173	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX174	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX175	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX176	24794220	EL, 22 μ F, $\pm$ 20%, 16V

Location No.	Part No.	Description
CX177	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX178	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX179	24092441	Chip, 1μF, +80%, -20%, 16V
CX180	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX184	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX185	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX186	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX187	24092732	Chip, 3.3μF, ±10%, 6.3V
CX188	24092732	Chip, 3.3μF, ±10%, 6.3V
CX189	24092732	Chip, 3.3μF, ±10%, 6.3V
CX190	24774330	Chip, 33pF, CH
CX191	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX192	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX193	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX194	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX201	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX202	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX203	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX204	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX205	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX206	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX207	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX208	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX209	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX210	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX211	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX212	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX213	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX214	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX215	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX216	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX217	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX218	24794471	EL, 470μF, ±20%, 16V
CX221	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX222	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX224	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX225	24794220	EL, 22μF, ±20%, 16V
CX226	24794101	EL, 100μF, ±20%, 16V
CX227	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX228	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX230	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX231	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX232	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX234	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX235	24797229	EL, 2.2μF, ±20%, 50V
CX236	24794101	EL, 100μF, ±20%, 16V
CX237	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX238	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX239	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX240	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX241	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX242	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX243	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX244	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX245	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX246	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX247	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX248	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX249	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX250	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX251	24794471	EL, 470μF, ±20%, 16V
CX261	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX262	24774470	Chip, 47pF, CH
CX271	24092293	Chip, 0.1μF, +80%, -20%, 25V

Location No.	Part No.	Description
CX301	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX302	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX303	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX304	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX305	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX306	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX307	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX308	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX309	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX310	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX311	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX321	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX322	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX323	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX324	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX325	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX326	24774680	Chip, 68pF, CH
CX328	24774330	Chip, 33pF, CH
CX329	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX330	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CX341	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX342	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX343	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX344	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX345	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX346	24774181	Chip, 180pF, CH
CX348	24774181	Chip, 180pF, CH
CX349	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX350	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CX361	24794100	EL, 10 μ F, $\pm$ 20%, 16V
CX362	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX363	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX364	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX365	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX366	24774181	Chip, 180pF, CH
CX368	24774181	Chip, 180pF, CH
CX369	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX370	24794470	EL, 47 μ F, $\pm$ 20%, 16V
CX401	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX402	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX403	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX404	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX405	24794471	EL, 470 μ F, $\pm$ 20%, 16V
CX406	24794471	EL, 470 μ F, $\pm$ 20%, 16V
CX407	24774220	Chip, 22pF, CH
CX408	24774220	Chip, 22pF, CH
CX409	24774220	Chip, 22pF, CH
CX410	24774220	Chip, 22pF, CH
CX411	24774220	Chip, 22pF, CH
CX412	24774220	Chip, 22pF, CH
CX421	24774221	Chip, 220pF, CH
CX422	24774221	Chip, 220pF, CH
CX423	24774221	Chip, 220pF, CH
CX424	24774221	Chip, 220pF, CH
CX425	24774221	Chip, 220pF, CH
CX427	24774221	Chip, 220pF, CH
CX428	24774330	Chip, 33pF, CH
CX429	24774330	Chip, 33pF, CH
CX430	24774221	Chip, 220pF, CH
CX431	24073020	EL, 1000 μ F, $\pm$ 20%, 10V
CX432	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX433	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CX434	24092441	Chip, 1 μ F, +80%, -20%, 16V
CX435	24092293	Chip, 0.1 μ F, +80%, -20%, 25V

Location No.	Part No.	Description
CX436	24092293	Chip, 0.1 μ F, +80%, -20%, 25V
CZ08	24203100	EL, 10 μ F, $\pm$ 20%, 16V
CZ09	24781220	Chip, 22pF, SL
CZ10	24781180	Chip, 18pF, SL
CZ11	24781100	Chip, 10pF, $\pm$ 0.5pF%, SL
CZ12	24814103	Chip, 0.01 μ F, +80%, -20%
CZ13	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
CZ14	24206100	EL, 10 μ F, $\pm$ 20%, 50V
CZ15	24814103	Chip, 0.01 μ F, +80%, -20%
CZ16	24206010	EL, 1 μ F, $\pm$ 20%, 50V
CZ17	24814103	Chip, 0.01 μ F, +80%, -20%
CZ19	24781181	Chip, 180pF, SL
CZ20	24567103	PF, 0.01 μ F
CZ21	24781122	Chip, 1200pF, SL
CZ22	24206100	EL, 10 μ F, $\pm$ 20%, 50V
CZ23	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
CZ24	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
CZ25	24763471	EL, 470 μ F, $\pm$ 20%, 16V
CZ26	24814103	Chip, 0.01 μ F, +80%, -20%
CZ28	24814103	Chip, 0.01 μ F, +80%, -20%
CZ29	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
CZ30	24206100	EL, 10 μ F, $\pm$ 20%, 50V
CZ32	24781120	Chip, 12pF, SL
CZ33	24781120	Chip, 12pF, SL
CZ34	24781120	Chip, 12pF, SL
CZ35	24781120	Chip, 12pF, SL
CZ36	24092178	Chip, 0.1 μ F, $\pm$ 10%, 25V
CZ45	24781100	Chip, 10pF, $\pm$ 0.5pF%, SL
CZ50	24814103	Chip, 0.01 μ F, +80%, -20%

RESISTORS

R101	24382223	OMF, 22k ohm, 1W
R102	24366104	CF, 100k ohm
R201	24872681	Chip, 680 ohm, 1/16W
R202	24872821	Chip, 820 ohm, 1/16W
R204	24872104	Chip, 100k ohm, 1/16W
R205	24872101	Chip, 100 ohm, 1/16W
R206	24872222	Chip, 2200 ohm, 1/16W
R207	24872101	Chip, 100 ohm, 1/16W
R208	24366103	CF, 10k ohm
R208	24872101	Chip, 100 ohm, 1/16W
R209	24366103	CF, 10k ohm
R209	24872101	Chip, 100 ohm, 1/16W
R211	24366473	CF, 47k ohm
R215	24872102	Chip, 1k ohm, 1/16W
R216	24872103	Chip, 10k ohm, 1/16W
R217	24366392	CF, 3900 ohm
R219	24366473	CF, 47k ohm(2998DG)
R219	24366433	CF, 43k ohm(3398DG)
R220	24872102	Chip, 1k ohm, 1/16W
R221	24872102	Chip, 1k ohm, 1/16W
R223	24872102	Chip, 1k ohm, 1/16W
R227	24366223	CF, 22k ohm
R229	24872472	Chip, 4700 ohm, 1/16W
R235	24872472	Chip, 4700 ohm, 1/16W
R236	24872102	Chip, 1k ohm, 1/16W
R237	24872103	Chip, 10k ohm, 1/16W
R240	24366102	CF, 1k ohm
R273	24872473	Chip, 47k ohm, 1/16W
R274	24872102	Chip, 1k ohm, 1/16W
R275	24872101	Chip, 100 ohm, 1/16W
R276	24872683	Chip, 68k ohm, 1/16W
R277	24872103	Chip, 10k ohm, 1/16W
R301	24366102	CF, 1k ohm

Location No.	Part No.	Description
R303	24321109	MF, 1 ohm, 1/2W
R304	24366223	CF, 22k ohm(2998DG)
R304	24366153	CF, 15k ohm(3398DG)
R305	24322129	MF, 1.2 ohm, 1W(2998DG)
R305	24322189	MF, 1.8 ohm, 1W(3398DG)
R306	24366222	CF, 2200 ohm
R307	24366621	CF, 620 ohm
R308	24366472	CF, 4700 ohm
R309	24366683	CF, 68k ohm(2998DG)
R309	24366393	CF, 39k ohm(3398DG)
R310	24366102	CF, 1k ohm
R312	24366163	CF, 16k ohm
R313	24366223	CF, 22k ohm(2998DG)
R313	24366303	CF, 30k ohm(3398DG)
R314	24366224	CF, 220k ohm(2998DG)
R314	24366105	CF, 1M ohm(3398DG)
R315	24366684	CF, 680k ohm
R316	24366154	CF, 150k ohm
R317	24366472	CF, 4700 ohm
R318	24366471	CF, 470 ohm
R319	24366471	CF, 470 ohm
R320	24366101	CF, 100 ohm
R321	24366123	CF, 12k ohm
R322	24366102	CF, 1k ohm
R323	24366103	CF, 10k ohm
R324	24366681	CF, 680 ohm
R325	24366103	CF, 10k ohm
R325	24366103	CF, 10k ohm
R327	24339229	MF, 2.2 ohm, 2W
R328	24366471	CF, 470 ohm
R329	24366103	CF, 10k ohm
R330	24366103	CF, 10k ohm
R331	24366104	CF, 100k ohm
R336	24383271	OMF, 270 ohm, 2W
R341	24366822	CF, 8200 ohm
R343	24366153	CF, 15k ohm
R344	24383561	OMF, 560 ohm, 2W(2998DG)
R344	24383122	OMF, 1200 ohm, 2W(3398DG)
R360	24366103	CF, 10k ohm
R370	24338159	MF, 1.5 ohm, 1W
R371	24366562	CF, 5600 ohm
R372	24366392	CF, 3900 ohm
R373	24366182	CF, 1800 ohm
R374	24366153	CF, 15k ohm
R398	24322189	OMF, 1.8 ohm, 1W(3398DG)
R399	24366684	CF, 680k ohm
R401	24872391	Chip, 390 ohm, 1/16W
R403	24872392	Chip, 3900 ohm, 1/16W
R405	24553682	OMF, 6800 ohm, 1W
R407	24872103	Chip, 10k ohm, 1/16W
R411	24366560	CF, 56 ohm
R414	24531560	FR, 56 ohm, 1/2W
R415	24553561	OMF, 560 ohm, 1W
R416	24381563	OMF, 56k ohm, 1/2W
R417	24510101	Cement, 100 ohm, 5W
R424	24366152	CF, 1500 ohm
R425	24366182	CF, 1800 ohm
R426	24366751	CF, 750 ohm
R427	24366392	CF, 3900 ohm
R428	24366561	CF, 560 ohm
R429	24552150	OMF, 15 ohm, 1/2W
R441	24383561	OMF, 560 ohm, 2W
R460	24552332	OMF, 3300 ohm, 1/2W
R461	24552821	OMF, 820 ohm, 1/2W(2998DG)

Location No.	Part No.	Description
R461	24552182	OMF, 1800 ohm, 1/2W (3398DG)
R463	24323229	MF, 2.2 ohm, 2W
R464	24366273	CF, 27k ohm
R465	24366114	CF, 110k ohm
R466	24366272	CF, 2700 ohm(2998DG)
R466	24366562	CF, 5600 ohm(3398DG)
R469	24000211	FR, 15 ohm, 1/2W
R470	24339568	MF, 0.56 ohm, 2W
R471	24531271	FR, 270 ohm, 1/2W
R473	24366183	CF, 18k ohm
R474	24366184	CF, 180k ohm
R478	24376333	CF, 33k ohm, 1/2W(2998DG)
R479	24531680	FR, 68 ohm, 1/2W
R480	24552222	OMF, 2200 ohm, 1/2W
R481	24366472	CF, 4700 ohm
R482	24366183	CF, 18k ohm
R487	24366154	CF, 150k ohm
R488	24366154	CF, 150k ohm
R490	24366101	CF, 100 ohm
R491	24366101	CF, 100 ohm
R492	24366472	CF, 4700 ohm
R501	24872223	Chip, 22k ohm, 1/16W
R502	24872101	Chip, 100 ohm, 1/16W
R503	24872101	Chip, 100 ohm, 1/16W
R505	24872102	Chip, 1k ohm, 1/16W
R506	24872103	Chip, 10k ohm, 1/16W
R508	24872102	Chip, 1k ohm, 1/16W
R509	24872102	Chip, 1k ohm, 1/16W
R510	24872102	Chip, 1k ohm, 1/16W
R511	24872472	Chip, 4700 ohm, 1/16W
R512	24872101	Chip, 100 ohm, 1/16W
R513	24366472	CF, 4700 ohm
R514	24366472	CF, 4700 ohm
R516	24872101	Chip, 100 ohm, 1/16W
R517	24872101	Chip, 100 ohm, 1/16W
R518	24872472	Chip, 4700 ohm, 1/16W
R519	24872101	Chip, 100 ohm, 1/16W
R520	24872103	Chip, 10k ohm, 1/16W
R521	24872223	Chip, 22k ohm, 1/16W
R522	24872473	Chip, 47k ohm, 1/16W
R530	24872223	Chip, 22k ohm, 1/16W
R531	24872103	Chip, 10k ohm, 1/16W
R609	24366563	CF, 56k ohm
R610	24366103	CF, 10k ohm
R611	24366103	CF, 10k ohm
R612	24366103	CF, 10k ohm
R613	24366224	CF, 220k ohm
R640	24366122	CF, 1200 ohm
R641	24366182	CF, 1800 ohm
R642	24366562	CF, 5600 ohm
R643	24366333	CF, 33k ohm
R644	24366473	CF, 47k ohm
R645	24366229	CF, 2.2 ohm
R646	24366223	CF, 22k ohm
R648	24366229	CF, 2.2 ohm
R649	24366223	CF, 22k ohm
R660	24510159	Cement, 1.5 ohm, 5W
R661	24510159	Cement, 1.5 ohm, 5W
R661	24552221	OMF, 220 ohm, 1/2W
R662	24366104	CF, 100k ohm
R662	24552221	OMF, 220 ohm, 1/2W
R670	24366272	CF, 2700 ohm
R671	24366102	CF, 1k ohm

Location No.	Part No.	Description
R671	24366392	CF, 3900 ohm
R672	24366102	CF, 1k ohm
R672	24366272	CF, 2700 ohm
R673	24366102	CF, 1k ohm
R673	24366392	CF, 3900 ohm
R674	24366102	CF, 1k ohm
R674	24366332	CF, 3300 ohm
R675	24366472	CF, 4700 ohm
R676	24366223	CF, 22k ohm
R676	24872223	Chip, 22k ohm, 1/16W
R677	24366223	CF, 22k ohm
R677	24872223	Chip, 22k ohm, 1/16W
R678	24872223	Chip, 22k ohm, 1/16W
R679	24872223	Chip, 22k ohm, 1/16W
R680	24872223	Chip, 22k ohm, 1/16W
R681	24872223	Chip, 22k ohm, 1/16W
R682	24366104	CF, 100k ohm
R683	24366273	CF, 27k ohm
R684	24366229	CF, 2.2 ohm
R685	24366229	CF, 2.2 ohm
R686	24366229	CF, 2.2 ohm
R688	24366222	CF, 2200 ohm
R689	24366104	CF, 100k ohm
R690	24872681	Chip, 680 ohm, 1/16W
R691	24872681	Chip, 680 ohm, 1/16W
R692	24872681	Chip, 680 ohm, 1/16W
R693	24872681	Chip, 680 ohm, 1/16W
R702	24552221	OMF, 220 ohm, 1/2W
R712	24366101	CF, 100 ohm
R715	24366393	CF, 39k ohm
R716	24366273	CF, 27k ohm
R717	24366333	CF, 33k ohm
R718	24366102	CF, 1k ohm
R722	24552471	OMF, 470 ohm, 1/2W
R723	24366151	CF, 150 ohm
R724	24366820	CF, 82 ohm
R725	24366182	CF, 1800 ohm
R730	24552100	OMF, 10 ohm, 1/2W
R731	24553331	OMF, 330 ohm, 1W
R732	24366220	CF, 22 ohm
R733	24366683	CF, 68k ohm
R734	24366220	CF, 22 ohm
R735	24366683	CF, 68k ohm
R736	24366560	CF, 56 ohm
R737	24366152	CF, 1500 ohm
R738	24366123	CF, 12k ohm
R739	24366152	CF, 1500 ohm
R740	24366560	CF, 56 ohm
R741	24366279	CF, 2.7 ohm
R742	24366279	CF, 2.7 ohm
R743	24554101	OMF, 100 ohm, 2W
R744	24366122	CF, 1200 ohm
R745	24366122	CF, 1200 ohm
△ R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W
R803	24382683	OMF, 68k ohm, 1W
R805	24552101	OMF, 100 ohm, 1/2W
R806	24552392	OMF, 3900 ohm, 1/2W
R808	24019340	PTC Thermistor, 18 ohm, 290V
R810	24007492	Cement, 2.2 ohm, 20W
R811	24568271	Cement, 270 ohm, 7W
R814	24366122	CF, 1200 ohm
R815	24552102	OMF, 1k ohm, 1/2W

Location No.	Part No.	Description
R816	24323689	MF, 6.8 ohm, 2W
R818	24322228	MF, 0.22 ohm, 1W
R819	24321279	MF, 2.7 ohm, 1/2W
R821	24366101	CF, 100 ohm
R822	24552103	OMF, 10k ohm, 1/2W
R823	24366272	CF, 2700 ohm
R824	24569101	Cement, 100 ohm, 10W
R825	24569100	Cement, 10 ohm, 10W
R827	24366681	CF, 680 ohm
R828	24366821	CF, 820 ohm
R829	24322228	MF, 0.22 ohm, 1W
R832	24366471	CF, 470 ohm
R833	24366471	CF, 470 ohm
R841	24531120	FR, 12 ohm, 1/2W
R842	24552392	OMF, 3900 ohm, 1/2W
R846	24366561	CF, 560 ohm
R847	24366472	CF, 4700 ohm
R890	24553333	OMF, 33k ohm, 1W
△ R899	24005007	Metal-Glazed Resistor, 8.2M ohm, 1W
R901	24376821	CF, 820 ohm, 1/2W
R902	24376821	CF, 820 ohm, 1/2W
R903	24376821	CF, 820 ohm, 1/2W
R904	24366472	CF, 4700 ohm
R905	24366150	CF, 15 ohm
R906	24366102	CF, 1k ohm
R907	24366102	CF, 1k ohm
R908	24366102	CF, 1k ohm
R909	24366222	CF, 2200 ohm
R912	24366102	CF, 1k ohm
R914	24366101	CF, 100 ohm
R915	24366560	CF, 56 ohm
R916	24366470	CF, 47 ohm
R917	24366271	CF, 270 ohm
R918	24366100	CF, 10 ohm
R919	24366102	CF, 1k ohm
R920	24000874	FR, 4.3 ohm, 1W(2998DG)
R920	24000880	FR, 5.1 ohm, 1W(3398DG)
R921	24366101	CF, 100 ohm
R922	24366560	CF, 56 ohm
R924	24366100	CF, 10 ohm
R925	24366271	CF, 270 ohm
R926	24366102	CF, 1k ohm
R928	24366101	CF, 100 ohm
R929	24366560	CF, 56 ohm
R930	24366100	CF, 10 ohm
R932	24366332	CF, 3300 ohm
R933	24366750	CF, 75 ohm
R934	24366391	CF, 390 ohm
R935	24366821	CF, 820 ohm
R936	24366750	CF, 75 ohm
R937	24366271	CF, 270 ohm
R939	24366680	CF, 68 ohm
R942	24366392	CF, 3900 ohm
R943	24366392	CF, 3900 ohm
R944	24366392	CF, 3900 ohm
R945	24366470	CF, 47 ohm
R946	24366470	CF, 47 ohm
R960	24383153	OMF, 15k ohm, 2W
R961	24383153	OMF, 15k ohm, 2W
R962	24383153	OMF, 15k ohm, 2W
R963	24383153	OMF, 15k ohm, 2W
R964	24383153	OMF, 15k ohm, 2W
R965	24383153	OMF, 15k ohm, 2W

Location No.	Part No.	Description
R966	24383153	OMF, 15k ohm, 2W
R967	24383153	OMF, 15k ohm, 2W
R968	24383153	OMF, 15k ohm, 2W
R969	24366101	CF, 100 ohm
R970	24366101	CF, 100 ohm
R971	24366101	CF, 100 ohm
R977	24366681	CF, 680 ohm
R980	24366471	CF, 470 ohm
R981	24366471	CF, 470 ohm
R982	24366682	CF, 6800 ohm
R983	24366222	CF, 2200 ohm
R984	24366821	CF, 820 ohm
R985	24366471	CF, 470 ohm
R986	24366681	CF, 680 ohm
R987	24366681	CF, 680 ohm
R988	24366472	CF, 4700 ohm
R989	24366562	CF, 5600 ohm
R990	24366222	CF, 2200 ohm
R991	24366681	CF, 680 ohm
R992	24366150	CF, 15 ohm
R4034	24366332	CF, 3300 ohm
R4301	24366222	CF, 2200 ohm
R4302	24366103	CF, 10k ohm
R4303	24019090	MF, 300k ohm, 1/6W
R4305	24366472	CF, 4700 ohm
R4306	24366393	CF, 39k ohm
R4350	24000249	MF, 47k ohm, 1/4W
R4401	24366103	CF, 10k ohm
R4402	24366222	CF, 2200 ohm
R4403	24000639	MF, 22k ohm, 1/4W
R4404	24000364	MF, 1800 ohm, 1/4W
R4405	24000247	MF, 39k ohm, 1/4W
R4406	24000220	MF, 390 ohm, 1/4W
R4408	24000637	MF, 15k ohm, 1/4W
R4409	24000361	MF, 1.3k ohm, 1/4W
R4410	24552470	OMF, 47 ohm, 1/2W
R4411	24366472	CF, 4700 ohm
R4412	24366103	CF, 10k ohm
R4413	24366132	CF, 1300 ohm
R4420	24000639	MF, 22k ohm, 1/4W
R4421	24366103	CF, 10k ohm
R4422	24366473	CF, 47k ohm
R4423	24366223	CF, 22k ohm
R4424	24366103	CF, 10k ohm
R4450	24066878	VR, 2k ohm, 0.3W
RA02	24366102	CF, 1k ohm
RA03	24366102	CF, 1k ohm
RA04	24366102	CF, 1k ohm
RA05	24366102	CF, 1k ohm
RA07	24366102	CF, 1k ohm
RA08	24366102	CF, 1k ohm
RA10	24366101	CF, 100 ohm
RA11	24366472	CF, 4700 ohm
RA12	24366472	CF, 4700 ohm
RA13	24366153	CF, 15k ohm
RA14	24366153	CF, 15k ohm
RA15	24366103	CF, 10k ohm
RA16	24366102	CF, 1k ohm
RA17	24366102	CF, 1k ohm
RA18	24366102	CF, 1k ohm
RA26	24366102	CF, 1k ohm
RA28	24366102	CF, 1k ohm
RA29	24366102	CF, 1k ohm
RA31	24366561	CF, 560 ohm

Location No.	Part No.	Description
RA32	24366222	CF, 2200 ohm
RA33	24366103	CF, 10k ohm
RA35	24366102	CF, 1k ohm
RA36	24366472	CF, 4700 ohm
RA37	24366101	CF, 100 ohm
RA38	24366101	CF, 100 ohm
RA39	24366102	CF, 1k ohm
RA40	24366331	CF, 330 ohm
RA41	24366273	CF, 27k ohm
RA61	24366103	CF, 10k ohm
RA62	24366103	CF, 10k ohm
RA64	24366103	CF, 10k ohm
RA65	24366103	CF, 10k ohm
RA66	24366103	CF, 10k ohm
RA67	24366472	CF, 4700 ohm
RA70	24366333	CF, 33k ohm
RA71	24366683	CF, 68k ohm
RA72	24366223	CF, 22k ohm
RA73	24366103	CF, 10k ohm
RA75	24366333	CF, 33k ohm
RA76	24366103	CF, 10k ohm
RA78	24366102	CF, 1k ohm
RA91	24366223	CF, 22k ohm
RB01	24366271	CF, 270 ohm
RB02	24366271	CF, 270 ohm
RB03	24366101	CF, 100 ohm
RB09	24366470	CF, 47 ohm
RB10	24366101	CF, 100 ohm
RB11	24366103	CF, 10k ohm
RB30	24366103	CF, 10k ohm
RB40	24366103	CF, 10k ohm
RB41	24366182	CF, 1800 ohm
RB42	24366102	CF, 1k ohm
RB43	24366103	CF, 10k ohm
RB44	24366103	CF, 10k ohm
RB45	24366101	CF, 100 ohm
RB81	24366122	CF, 1200 ohm
RB82	24366123	CF, 12k ohm
RB83	24366123	CF, 12k ohm
RB84	24366562	CF, 5600 ohm
RB90	24366392	CF, 3900 ohm
RB91	24366473	CF, 47k ohm
RB92	24366271	CF, 270 ohm
RB93	24366271	CF, 270 ohm
RB94	24366222	CF, 2200 ohm
RB95	24366222	CF, 2200 ohm
RB96	24366273	CF, 27k ohm
RB97	24366273	CF, 27k ohm
RB98	24366102	CF, 1k ohm
RD01	24872101	Chip, 100 ohm, 1/16W
RD02	24872101	Chip, 100 ohm, 1/16W
RD03	24872473	Chip, 47k ohm, 1/16W
RD04	24872101	Chip, 100 ohm, 1/16W
RD05	24872101	Chip, 100 ohm, 1/16W
RD06	24872101	Chip, 100 ohm, 1/16W
RD07	24872101	Chip, 100 ohm, 1/16W
RD08	24872101	Chip, 100 ohm, 1/16W
RD28	24872101	Chip, 100 ohm, 1/16W
RD29	24872101	Chip, 100 ohm, 1/16W
RD30	24872223	Chip, 22k ohm, 1/16W
RD31	24872223	Chip, 22k ohm, 1/16W
RD32	24872223	Chip, 22k ohm, 1/16W
RD33	24872101	Chip, 100 ohm, 1/16W
RD34	24872102	Chip, 1k ohm, 1/16W

Location No.	Part No.	Description
RD35	24872102	Chip, 1k ohm, 1/16W
RD36	24872101	Chip, 100 ohm, 1/16W
RD37	24872223	Chip, 22k ohm, 1/16W
RD38	24872223	Chip, 22k ohm, 1/16W
RD39	24872101	Chip, 100 ohm, 1/16W
RD40	24872101	Chip, 100 ohm, 1/16W
RF01	24366222	CF, 2200 ohm
RF03	24366472	CF, 4700 ohm
RF04	24366472	CF, 4700 ohm
RF06	24366102	CF, 1k ohm
RF08	24366100	CF, 10 ohm
RF09	24366100	CF, 10 ohm
RF10	24366100	CF, 10 ohm
RF11	24366103	CF, 10k ohm
RF12	24366101	CF, 100 ohm
RF13	24366101	CF, 100 ohm
RF14	24366101	CF, 100 ohm
RF15	24366103	CF, 10k ohm
RF16	24366471	CF, 470 ohm
RF20	24366222	CF, 2200 ohm
RF21	24366471	CF, 470 ohm
RF22	24366471	CF, 470 ohm
RF26	24366102	CF, 1k ohm
RQ01	24872102	Chip, 1k ohm, 1/16W
RQ03	24872102	Chip, 1k ohm, 1/16W
RQ04	24872511	Chip, 510 ohm, 1/16W
RQ05	24872471	Chip, 470 ohm, 1/16W
RQ06	24872471	Chip, 470 ohm, 1/16W
RQ07	24872103	Chip, 10k ohm, 1/16W
RQ08	24872102	Chip, 1k ohm, 1/16W
RQ09	24872102	Chip, 1k ohm, 1/16W
RQ10	24872102	Chip, 1k ohm, 1/16W
RQ11	24872561	Chip, 560 ohm, 1/16W
RQ12	24872561	Chip, 560 ohm, 1/16W
RQ13	24872203	Chip, 20k ohm, 1/16W
RQ14	24872273	Chip, 27k ohm, 1/16W
RQ20	24872563	Chip, 56k ohm, 1/16W
RR01	24872181	Chip, 180 ohm, 1/16W
RR02	24872181	Chip, 180 ohm, 1/16W
RR03	24872181	Chip, 180 ohm, 1/16W
RR10	24872103	Chip, 10k ohm, 1/16W
RR11	24872473	Chip, 47k ohm, 1/16W
RR12	24872102	Chip, 1k ohm, 1/16W
RR13	24872622	Chip, 6200 ohm, 1/16W
RR20	24872103	Chip, 10k ohm, 1/16W
RR28	24872473	Chip, 47k ohm, 1/16W
RR29	24872473	Chip, 47k ohm, 1/16W
RR40	24872102	Chip, 1k ohm, 1/16W
RS01	24872681	Chip, 680 ohm, 1/16W
RS02	24872681	Chip, 680 ohm, 1/16W
RS03	24872101	Chip, 100 ohm, 1/16W
RS04	24872101	Chip, 100 ohm, 1/16W
RS05	24872472	Chip, 4700 ohm, 1/16W
RS06	24872472	Chip, 4700 ohm, 1/16W
RS07	24872472	Chip, 4700 ohm, 1/16W
RS08	24872472	Chip, 4700 ohm, 1/16W
RS09	24872472	Chip, 4700 ohm, 1/16W
RS10	24872472	Chip, 4700 ohm, 1/16W
RS11	24872101	Chip, 100 ohm, 1/16W
RS13	24872101	Chip, 100 ohm, 1/16W
RS14	24872101	Chip, 100 ohm, 1/16W
RS15	24872104	Chip, 100k ohm, 1/16W
RS16	24872104	Chip, 100k ohm, 1/16W
RS17	24872223	Chip, 22k ohm, 1/16W

Location No.	Part No.	Description
RS18	24872223	Chip, 22k ohm, 1/16W
RS19	24872102	Chip, 1k ohm, 1/16W
RS20	24872102	Chip, 1k ohm, 1/16W
RS21	24872222	Chip, 2200 ohm, 1/16W
RS22	24872222	Chip, 2200 ohm, 1/16W
RS23	24872101	Chip, 100 ohm, 1/16W
RS24	24872101	Chip, 100 ohm, 1/16W
RS27	24872104	Chip, 100k ohm, 1/16W
RS28	24872104	Chip, 100k ohm, 1/16W
RS29	24872223	Chip, 22k ohm, 1/16W
RS30	24872223	Chip, 22k ohm, 1/16W
RS31	24872103	Chip, 10k ohm, 1/16W
RS32	24872104	Chip, 100k ohm, 1/16W
RS35	24872223	Chip, 22k ohm, 1/16W
RS36	24872223	Chip, 22k ohm, 1/16W
RS37	24872104	Chip, 100k ohm, 1/16W
RS38	24872104	Chip, 100k ohm, 1/16W
RS43	24872681	Chip, 680 ohm, 1/16W
RS44	24872681	Chip, 680 ohm, 1/16W
RS45	24872681	Chip, 680 ohm, 1/16W
RS46	24872681	Chip, 680 ohm, 1/16W
RV01	24872101	Chip, 100 ohm, 1/16W
RV02	24872101	Chip, 100 ohm, 1/16W
RV03	24872101	Chip, 100 ohm, 1/16W
RV04	24872101	Chip, 100 ohm, 1/16W
RV05	24872101	Chip, 100 ohm, 1/16W
RV06	24872101	Chip, 100 ohm, 1/16W
RV07	24872162	Chip, 1600 ohm, 1/16W
RV08	24872162	Chip, 1600 ohm, 1/16W
RV09	24872101	Chip, 100 ohm, 1/16W
RV10	24872101	Chip, 100 ohm, 1/16W
RV12	24872681	Chip, 680 ohm, 1/16W
RV13	24872681	Chip, 680 ohm, 1/16W
RV14	24872101	Chip, 100 ohm, 1/16W
RV16	24872271	Chip, 270 ohm, 1/16W
RV18	24872123	Chip, 12k ohm, 1/16W
RV19	24872101	Chip, 100 ohm, 1/16W
RV20	24872101	Chip, 100 ohm, 1/16W
RV21	24366100	CF, 10 ohm
RV21	24872102	Chip, 1k ohm, 1/16W
RV22	24366222	CF, 2200 ohm
RV22	24872391	Chip, 390 ohm, 1/16W
RV23	24552101	OMF, 100 ohm, 1/2W
RV25	24872101	Chip, 100 ohm, 1/16W
RV26	24366181	CF, 180 ohm
RV27	24872750	Chip, 75 ohm, 1/16W
RV28	24872683	Chip, 68k ohm, 1/16W
RV29	24872273	Chip, 27k ohm, 1/16W
RV30	24872750	Chip, 75 ohm, 1/16W
RV31	24872750	Chip, 75 ohm, 1/16W
RV32	24872750	Chip, 75 ohm, 1/16W
RV33	24872123	Chip, 12k ohm, 1/16W
RV34	24872123	Chip, 12k ohm, 1/16W
RV35	24872103	Chip, 10k ohm, 1/16W
RV36	24872101	Chip, 100 ohm, 1/16W
RV37	24872750	Chip, 75 ohm, 1/16W
RV60	24872102	Chip, 1k ohm, 1/16W
RV61	24552101	OMF, 100 ohm, 1/2W
RV62	24872101	Chip, 100 ohm, 1/16W
RV63	24552151	OMF, 150 ohm, 1/2W
RV64	24872750	Chip, 75 ohm, 1/16W
RV65	24552101	OMF, 100 ohm, 1/2W
RV66	24872101	Chip, 100 ohm, 1/16W
RV67	24552151	OMF, 150 ohm, 1/2W

Location No.	Part No.	Description
RV68	24872750	Chip, 75 ohm, 1/16W
RV70	24872101	Chip, 100 ohm, 1/16W
RV71	24872472	Chip, 4700 ohm, 1/16W
RV73	24872103	Chip, 10k ohm, 1/16W
RV74	24872104	Chip, 100k ohm, 1/16W
RV78	24872100	Chip, 10 ohm, 1/16W
RV79	24872102	Chip, 1k ohm, 1/16W
RV80	24366681	CF, 680 ohm
RV80	24872271	Chip, 270 ohm, 1/16W
RV81	24872750	Chip, 75 ohm, 1/16W
RV82	24872101	Chip, 100 ohm, 1/16W
RV83	24366681	CF, 680 ohm
RV85	24872750	Chip, 75 ohm, 1/16W
RV86	24872750	Chip, 75 ohm, 1/16W
RV87	24872750	Chip, 75 ohm, 1/16W
RV89	24872750	Chip, 75 ohm, 1/16W
RV90	24872681	Chip, 680 ohm, 1/16W
RV91	24872681	Chip, 680 ohm, 1/16W
RV92	24872100	Chip, 10 ohm, 1/16W
RV93	24872104	Chip, 100k ohm, 1/16W
RV94	24872103	Chip, 10k ohm, 1/16W
RV95	24872472	Chip, 4700 ohm, 1/16W
RV97	24872101	Chip, 100 ohm, 1/16W
RX101	24872220	Chip, 22 ohm, 1/16W
RX102	24872681	Chip, 680 ohm, 1/16W
RX103	24872221	Chip, 220 ohm, 1/16W
RX104	24872821	Chip, 820 ohm, 1/16W
RX106	24872331	Chip, 330 ohm, 1/16W
RX107	24872821	Chip, 820 ohm, 1/16W
RX108	24872680	Chip, 68 ohm, 1/16W
RX109	24872331	Chip, 330 ohm, 1/16W
RX110	24872821	Chip, 820 ohm, 1/16W
RX111	24872121	Chip, 120 ohm, 1/16W
RX112	24872100	Chip, 10 ohm, 1/16W
RX113	24872471	Chip, 470 ohm, 1/16W
RX114	24872681	Chip, 680 ohm, 1/16W
RX115	24872105	Chip, 1M ohm, 1/16W
RX141	24872220	Chip, 22 ohm, 1/16W
RX142	24872471	Chip, 470 ohm, 1/16W
RX143	24872153	Chip, 15k ohm, 1/16W
RX144	24872103	Chip, 10k ohm, 1/16W
RX145	24872331	Chip, 330 ohm, 1/16W
RX146	24872301	Chip, 300 ohm, 1/16W
RX147	24872681	Chip, 680 ohm, 1/16W
RX148	24872103	Chip, 10k ohm, 1/16W
RX149	24872103	Chip, 10k ohm, 1/16W
RX150	24872100	Chip, 10 ohm, 1/16W
RX151	24872102	Chip, 1k ohm, 1/16W
RX152	24872331	Chip, 330 ohm, 1/16W
RX155	24872102	Chip, 1k ohm, 1/16W
RX156	24872821	Chip, 820 ohm, 1/16W
RX157	24872471	Chip, 470 ohm, 1/16W
RX158	24872471	Chip, 470 ohm, 1/16W
RX161	24872220	Chip, 22 ohm, 1/16W
RX162	24872471	Chip, 470 ohm, 1/16W
RX163	24872153	Chip, 15k ohm, 1/16W
RX164	24872103	Chip, 10k ohm, 1/16W
RX165	24872331	Chip, 330 ohm, 1/16W
RX166	24872301	Chip, 300 ohm, 1/16W
RX167	24872681	Chip, 680 ohm, 1/16W
RX168	24872103	Chip, 10k ohm, 1/16W
RX169	24872103	Chip, 10k ohm, 1/16W
RX170	24872100	Chip, 10 ohm, 1/16W
RX171	24872102	Chip, 1k ohm, 1/16W

Location No.	Part No.	Description
RX172	24872331	Chip, 330 ohm, 1/16W
RX175	24872102	Chip, 1k ohm, 1/16W
RX176	24872821	Chip, 820 ohm, 1/16W
RX177	24872471	Chip, 470 ohm, 1/16W
RX178	24872471	Chip, 470 ohm, 1/16W
RX181	24872680	Chip, 68 ohm, 1/16W
RX185	24872100	Chip, 10 ohm, 1/16W
RX186	24000824	Chip, Jumper, 2125 type
RX201	24872103	Chip, 10k ohm, 1/16W
RX202	24872103	Chip, 10k ohm, 1/16W
RX203	24872103	Chip, 10k ohm, 1/16W
RX204	24000824	Chip, Jumper, 2125 type
RX205	24019439	Chip, 47 ohm, 1/16W
RX206	24019439	Chip, 47 ohm, 1/16W
RX207	24019439	Chip, 47 ohm, 1/16W
RX208	24019439	Chip, 47 ohm, 1/16W
RX209	24019439	Chip, 47 ohm, 1/16W
RX210	24019439	Chip, 47 ohm, 1/16W
RX211	24019439	Chip, 47 ohm, 1/16W
RX212	24019439	Chip, 47 ohm, 1/16W
RX213	24872103	Chip, 10k ohm, 1/16W
RX214	24872103	Chip, 10k ohm, 1/16W
RX215	24872103	Chip, 10k ohm, 1/16W
RX221	24000824	Chip, Jumper, 2125 type
RX222	24872100	Chip, 10 ohm, 1/16W
RX223	24872100	Chip, 10 ohm, 1/16W
RX225	24872151	Chip, 150 ohm, 1/16W
RX226	24872331	Chip, 330 ohm, 1/16W
RX229	24872332	Chip, 3300 ohm, 1/16W
RX230	24872103	Chip, 10k ohm, 1/16W
RX231	24000824	Chip, Jumper, 2125 type
RX232	24872100	Chip, 10 ohm, 1/16W
RX233	24872100	Chip, 10 ohm, 1/16W
RX235	24872274	Chip, 270k ohm, 1/16W
RX236	24872472	Chip, 4700 ohm, 1/16W
RX237	24872221	Chip, 220 ohm, 1/16W
RX240	24872272	Chip, 2700 ohm, 1/16W
RX251	24872470	Chip, 47 ohm, 1/16W
RX252	24872470	Chip, 47 ohm, 1/16W
RX253	24872470	Chip, 47 ohm, 1/16W
RX254	24872470	Chip, 47 ohm, 1/16W
RX255	24872470	Chip, 47 ohm, 1/16W
RX256	24000824	Chip, Jumper, 2125 type
RX258	24000824	Chip, Jumper, 2125 type
RX259	24000824	Chip, Jumper, 2125 type
RX261	24872101	Chip, 100 ohm, 1/16W
RX263	24872101	Chip, 100 ohm, 1/16W
RX271	24872103	Chip, 10k ohm, 1/16W
RX272	24872103	Chip, 10k ohm, 1/16W
RX273	24872103	Chip, 10k ohm, 1/16W
RX281	24019439	Chip, 47 ohm, 1/16W
RX282	24872470	Chip, 47 ohm, 1/16W
RX283	24872470	Chip, 47 ohm, 1/16W
RX285	24872470	Chip, 47 ohm, 1/16W
RX286	24872470	Chip, 47 ohm, 1/16W
RX287	24872470	Chip, 47 ohm, 1/16W
RX288	24872470	Chip, 47 ohm, 1/16W
RX289	24872470	Chip, 47 ohm, 1/16W
RX290	24000824	Chip, Jumper, 2125 type
RX301	24872151	Chip, 150 ohm, 1/16W
RX302	24872272	Chip, 2700 ohm, 1/16W
RX303	24872151	Chip, 150 ohm, 1/16W
RX304	24872272	Chip, 2700 ohm, 1/16W
RX305	24872151	Chip, 150 ohm, 1/16W

Location No.	Part No.	Description
RX306	24872272	Chip, 2700 ohm, 1/16W
RX307	24872222	Chip, 2200 ohm, 1/16W
RX308	24872242	Chip, 2400 ohm, 1/16W
RX309	24872122	Chip, 1200 ohm, 1/16W
RX310	24872122	Chip, 1200 ohm, 1/16W
RX311	24872122	Chip, 1200 ohm, 1/16W
RX321	24872153	Chip, 15k ohm, 1/16W
RX322	24872103	Chip, 10k ohm, 1/16W
RX323	24872103	Chip, 10k ohm, 1/16W
RX324	24872103	Chip, 10k ohm, 1/16W
RX325	24000824	Chip, Jumper, 2125 type
RX326	24872331	Chip, 330 ohm, 1/16W
RX327	24872471	Chip, 470 ohm, 1/16W
RX328	24872681	Chip, 680 ohm, 1/16W
RX329	24872100	Chip, 10 ohm, 1/16W
RX330	24872102	Chip, 1k ohm, 1/16W
RX331	24872151	Chip, 150 ohm, 1/16W
RX332	24872102	Chip, 1k ohm, 1/16W
RX334	24872681	Chip, 680 ohm, 1/16W
RX335	24872220	Chip, 22 ohm, 1/16W
RX341	24872153	Chip, 15k ohm, 1/16W
RX342	24872103	Chip, 10k ohm, 1/16W
RX343	24872103	Chip, 10k ohm, 1/16W
RX344	24872103	Chip, 10k ohm, 1/16W
RX345	24000824	Chip, Jumper, 2125 type
RX346	24872331	Chip, 330 ohm, 1/16W
RX347	24872471	Chip, 470 ohm, 1/16W
RX348	24872681	Chip, 680 ohm, 1/16W
RX349	24872100	Chip, 10 ohm, 1/16W
RX350	24872102	Chip, 1k ohm, 1/16W
RX351	24872121	Chip, 120 ohm, 1/16W
RX352	24872681	Chip, 680 ohm, 1/16W
RX354	24872681	Chip, 680 ohm, 1/16W
RX355	24872220	Chip, 22 ohm, 1/16W
RX361	24872153	Chip, 15k ohm, 1/16W
RX362	24872103	Chip, 10k ohm, 1/16W
RX363	24872103	Chip, 10k ohm, 1/16W
RX364	24872103	Chip, 10k ohm, 1/16W
RX365	24000824	Chip, Jumper, 2125 type
RX366	24872331	Chip, 330 ohm, 1/16W
RX367	24872471	Chip, 470 ohm, 1/16W
RX368	24872681	Chip, 680 ohm, 1/16W
RX369	24872100	Chip, 10 ohm, 1/16W
RX370	24872102	Chip, 1k ohm, 1/16W
RX371	24872121	Chip, 120 ohm, 1/16W
RX372	24872681	Chip, 680 ohm, 1/16W
RX374	24872681	Chip, 680 ohm, 1/16W
RX375	24872220	Chip, 22 ohm, 1/16W
RX401	24000824	Chip, Jumper, 2125 type
RX402	24872101	Chip, 100 ohm, 1/16W
RX403	24000824	Chip, Jumper, 2125 type
RX404	24872101	Chip, 100 ohm, 1/16W
RX405	24000824	Chip, Jumper, 2125 type
RX406	24872680	Chip, 68 ohm, 1/16W
RX407	24000824	Chip, Jumper, 2125 type
RX408	24872101	Chip, 100 ohm, 1/16W
RX409	24000824	Chip, Jumper, 2125 type
RX410	24872101	Chip, 100 ohm, 1/16W
RX411	24000824	Chip, Jumper, 2125 type
RX412	24872101	Chip, 100 ohm, 1/16W
RX421	24872221	Chip, 220 ohm, 1/16W
RX422	24872221	Chip, 220 ohm, 1/16W
RX423	24872221	Chip, 220 ohm, 1/16W
RX424	24872221	Chip, 220 ohm, 1/16W

Location No.	Part No.	Description
RX425	24872221	Chip, 220 ohm, 1/16W
RX427	24872221	Chip, 220 ohm, 1/16W
RX428	24872221	Chip, 220 ohm, 1/16W
RX429	24872221	Chip, 220 ohm, 1/16W
RX430	24872221	Chip, 220 ohm, 1/16W
RX431	24547688	FR, 0.68 ohm, 1W
RX432	24871181	Chip, 180 ohm, 1/8W
RZ01	24872471	Chip, 470 ohm, 1/16W
RZ02	24872152	Chip, 1500 ohm, 1/16W
RZ04	24872332	Chip, 3300 ohm, 1/16W
RZ05	24872332	Chip, 3300 ohm, 1/16W
RZ06	24872821	Chip, 820 ohm, 1/16W
RZ07	24872272	Chip, 2700 ohm, 1/16W
RZ08	24872332	Chip, 3300 ohm, 1/16W
RZ12	24872471	Chip, 470 ohm, 1/16W
RZ18	24872821	Chip, 820 ohm, 1/16W
RZ19	24872471	Chip, 470 ohm, 1/16W
RZ20	24872122	Chip, 1200 ohm, 1/16W
RZ23	24872821	Chip, 820 ohm, 1/16W
RZ24	24872821	Chip, 820 ohm, 1/16W
RZ25	24872101	Chip, 100 ohm, 1/16W
RZ26	24872101	Chip, 100 ohm, 1/16W
RZ28	24872821	Chip, 820 ohm, 1/16W
RZ29	24872331	Chip, 330 ohm, 1/16W
RZ30	24872331	Chip, 330 ohm, 1/16W

COILS & TRANSFORMERS

L101	23221803	Coil, Choke, TLN3040D
L102	23238562	Coil, Peaking, TRF4109AJ
L200	23289479	Coil, Peaking, TRF447AF
L201	23103845	Coil, TEM2030AY
L202	23103845	Coil, TEM2030AY
L301	23103859	Coil (Ferrite Bead), TEM2011
L302	23237975	Coil, Peaking, TRF4101AC
L333	23238702	Coil, Peaking, TRF4101AJ
L400	23289101	Coil, Peaking, TRF4101AF
L410	23103859	Coil (Ferrite Bead), TEM2011
L441	23233982	Coil, Linearity, TLN2158AG
L442	23248168	Coil, Choke, TLN3328AD (2998DG)
L442	23248216	Coil, Choke, TLN3459AH (3398DG)
L443	23248199	Coil, Choke, TLN3467AD (2998DG)
L443	23248165	Coil, Choke, TLN3438AD (3398DG)
L449	23103859	Coil (Ferrite Bead), TEM2011
L461	23248179	Coil, Choke, TLN3339AD
L470	23103859	Coil (Ferrite Bead), TEM2011
L491	23248183	Coil, Choke, TLN3343AD (2998DG)
L501	23289100	Coil, Peaking, TRF4100AF
L502	23103824	Coil, TEM2028K
L503	23289470	Coil, Peaking, TRF4470AF
L510	23238718	Coil, Peaking, TRF4479AJ
L601	23238714	Coil, Peaking, TRF4100AJ
L602	23238714	Coil, Peaking, TRF4100AJ
L603	23238562	Coil, Peaking, TRF4109AJ
L604	23238562	Coil, Peaking, TRF4109AJ
L643	23103859	Coil (Ferrite Bead), TEM2011
L644	23103859	Coil (Ferrite Bead), TEM2011
L671	23103859	Coil (Ferrite Bead), TEM2011
L672	23103859	Coil (Ferrite Bead), TEM2011

Location No.	Part No.	Description
L676	23103832	Chip (Ferrite Bead), TEM2125M
L677	23103832	Chip (Ferrite Bead), TEM2125M
L682	23103832	Chip (Ferrite Bead), TEM2125M
L683	23103832	Chip (Ferrite Bead), TEM2125M
L684	23289109	Coil, Peaking, TRF41R0AF
L685	23289109	Coil, Peaking, TRF41R0AF
L701	23289100	Coil, Peaking, TRF4100AF
L702	23261974	Coil, Choke, HC5-035
L704	23103859	Coil (Ferrite Bead), TEM2011
L705	23103859	Coil (Ferrite Bead), TEM2011
L801	23217383	Transformer, Choke, TPW2012AE (3398DG)
L811	23103859	Coil (Ferrite Bead), TEM2011
L814	23221747	Coil, Choke, TRF9253D
L883	23221747	Coil, Choke, TRF9253D
L885	23248073	Coil, Choke, TLN3299D
L886	23103859	Coil (Ferrite Bead), TEM2011
L889	23222694	Coil, Width, TLN2026
L891	23103859	Coil (Ferrite Bead), TEM2011
L892	23103859	Coil (Ferrite Bead), TEM2011
L893	23280016	Coil, Peaking, TRF4100AZ
L894	23289100	Coil, Peaking, TRF4100AF
L896	23103859	Coil (Ferrite Bead), TEM2011
L897	23222694	Coil, Width, TLN2026
△L901	23200277	Coil, Degaussing, TSB-2337BR (2998DG)
△L901	23200215	Coil, Degaussing, TSB-2340AR (3398DG)
L902	23289101	Coil, Peaking, TRF4101AF
L903	23289101	Coil, Peaking, TRF4101AF
L904	23289101	Coil, Peaking, TRF4101AF
L905	23289220	Coil, Peaking, TRF4220AF
L906	23289220	Coil, Peaking, TRF4220AF
L907	23289220	Coil, Peaking, TRF4220AF
L908	23289100	Coil, Peaking, TRF4100AF
L910	23289109	Coil, Peaking, TRF41R0AF
L911	23289101	Coil, Peaking, TRF4101AF
L912	23289150	Coil, Peaking, TRF4150AF
L913	23289150	Coil, Peaking, TRF4150AF
L914	23289150	Coil, Peaking, TRF4150AF
L4400	23221886	Coil, Choke, TLN3073
L4430	23289680	Coil, Peaking, TRF4680AF
LA01	23289100	Coil, Peaking, TRF4100AF
LD01	23238714	Coil, Peaking, TRF4100AJ
LD02	23238714	Coil, Peaking, TRF4100AJ
LD20	23103859	Coil (Ferrite Bead), TEM2011
LD21	23238714	Coil, Peaking, TRF4100AJ
LF01	23238506	Coil, Peaking, TRF4229AJ
LF02	23238506	Coil, Peaking, TRF4229AJ
LF03	23238506	Coil, Peaking, TRF4229AJ
LF04	23238506	Coil, Peaking, TRF4229AJ
LF06	23238562	Coil, Peaking, TRF4109AJ
LF07	23238562	Coil, Peaking, TRF4109AJ
LF08	23238714	Coil, Peaking, TRF4100AJ
LF09	23238714	Coil, Peaking, TRF4100AJ
LF10	23238562	Coil, Peaking, TRF4109AJ
LF11	23289109	Coil, Peaking, TRF41R0AF
LF13	23289100	Coil, Peaking, TRF4100AF
LQ01	23238709	Coil, Peaking, TRF4270AJ
LQ02	23237991	Coil, Peaking, TRF4479AC

Location No.	Part No.	Description
LQ03	23289470	Coil, Peaking, TRF4470AF
LQ04	23238718	Coil, Peaking, TRF4479AJ
LR01	23289100	Coil, Peaking, TRF4100AF
LV06	23103832	Chip (Ferrite Bead), TEM2125M
LV07	23103832	Chip (Ferrite Bead), TEM2125M
LV08	23289330	Coil, Peaking, TRF4330AF
LV09	23289100	Coil, Peaking, TRF4100AF
LV10	23289220	Coil, Peaking, TRF4220AF
LV11	23289330	Coil, Peaking, TRF4330AF
LV20	23103845	Coil, TEM2030AY
LV42	23289100	Coil, Peaking, TRF4100AF
LV43	23289100	Coil, Peaking, TRF4100AF
LV49	23103824	Coil, TEM2028K
LX101	23103822	Chip (Ferrite Bead), TEM2117T
LX102	23103822	Chip (Ferrite Bead), TEM2117T
LX103	23103822	Chip (Ferrite Bead), TEM2117T
LX104	23245827	Chip, Inductor, TRF45R6CB
LX105	23103822	Chip (Ferrite Bead), TEM2117T
LX106	23103822	Chip (Ferrite Bead), TEM2117T
LX107	23103822	Chip (Ferrite Bead), TEM2117T
LX108	24000824	Chip Jumper, 2125 Type
LX110	23103822	Chip (Ferrite Bead), TEM2117T
LX141	23103822	Chip (Ferrite Bead), TEM2117T
LX142	23103822	Chip (Ferrite Bead), TEM2117T
LX143	23245835	Chip, Inductor, TRF4270CB
LX144	23103822	Chip (Ferrite Bead), TEM2117T
LX145	23103822	Chip (Ferrite Bead), TEM2117T
LX146	23103822	Chip (Ferrite Bead), TEM2117T
LX147	23103822	Chip (Ferrite Bead), TEM2117T
LX148	23245835	Chip, Inductor, TRF4270CB
LX149	23103822	Chip (Ferrite Bead), TEM2117T
LX150	23103822	Chip (Ferrite Bead), TEM2117T
LX152	23103822	Chip (Ferrite Bead), TEM2117T
LX153	23103822	Chip (Ferrite Bead), TEM2117T
LX154	24000824	Chip Jumper, 2125 Type
LX156	23103822	Chip (Ferrite Bead), TEM2117T
LX157	23103822	Chip (Ferrite Bead), TEM2117T
LX158	24000824	Chip Jumper, 2125 Type
LX201	23103886	Chip (Ferrite Bead), TEM2129AM
LX202	24000824	Chip Jumper, 2125 Type
LX221	23103822	Chip (Ferrite Bead), TEM2117T
LX222	23103822	Chip (Ferrite Bead), TEM2117T
LX223	23103822	Chip (Ferrite Bead), TEM2117T
LX224	23103822	Chip (Ferrite Bead), TEM2117T
LX226	23103822	Chip (Ferrite Bead), TEM2117T
LX227	23103822	Chip (Ferrite Bead), TEM2117T
LX231	23103822	Chip (Ferrite Bead), TEM2117T
LX232	23103822	Chip (Ferrite Bead), TEM2117T
LX233	23103822	Chip (Ferrite Bead), TEM2117T
LX235	23103822	Chip (Ferrite Bead), TEM2117T
LX236	23103822	Chip (Ferrite Bead), TEM2117T
LX237	23103822	Chip (Ferrite Bead), TEM2117T
LX241	23103822	Chip (Ferrite Bead), TEM2117T
LX242	24000824	Chip Jumper, 2125 Type
LX261	23103822	Chip (Ferrite Bead), TEM2117T
LX262	24000824	Chip Jumper, 2125 Type
LX271	23103822	Chip (Ferrite Bead), TEM2117T
LX272	24000824	Chip Jumper, 2125 Type
LX301	23103822	Chip (Ferrite Bead), TEM2117T
LX302	23103822	Chip (Ferrite Bead), TEM2117T
LX303	23103822	Chip (Ferrite Bead), TEM2117T

Location No.	Part No.	Description
LX304	23103822	Chip (Ferrite Bead), TEM2117T
LX305	24000824	Chip Jumper, 2125 Type
LX321	23103822	Chip (Ferrite Bead), TEM2117T
LX322	23245825	Chip, Inductor, TRF43R9CB
LX323	24000824	Chip Jumper, 2125 Type
LX341	23103822	Chip (Ferrite Bead), TEM2117T
LX342	23245826	Chip, Inductor, TRF44R7CB
LX343	24000824	Chip Jumper, 2125 Type
LX361	23103822	Chip (Ferrite Bead), TEM2117T
LX362	23245826	Chip, Inductor, TRF44R7CB
LX363	24000824	Chip Jumper, 2125 Type
LX401	23103880	Coil (Ferrite Bead), TEM2011Y
LX402	23103822	Chip (Ferrite Bead), TEM2117T
LX403	23103822	Chip (Ferrite Bead), TEM2117T
LX404	23103822	Chip (Ferrite Bead), TEM2117T
LX405	23103822	Chip (Ferrite Bead), TEM2117T
LX407	23103822	Chip (Ferrite Bead), TEM2117T
LX421	23238562	Coil, Peaking, TRF4109AJ
LX422	23238562	Coil, Peaking, TRF4109AJ
LX423	23238562	Coil, Peaking, TRF4109AJ
LX424	23238562	Coil, Peaking, TRF4109AJ
LX425	23238562	Coil, Peaking, TRF4109AJ
LX427	23238562	Coil, Peaking, TRF4109AJ
LX428	23238718	Coil, Peaking, TRF4479AJ
LX429	23238718	Coil, Peaking, TRF4479AJ
LX430	23238562	Coil, Peaking, TRF4109AJ
LX431	23103880	Coil (Ferrite Bead), TEM2011Y
LX432	23103880	Coil (Ferrite Bead), TEM2011Y
LX434	23103880	Coil (Ferrite Bead), TEM2011Y
LZ01	23289150	Coil, Peaking, TRF4150AF
LZ03	23238716	Coil, Peaking, TRF4689AJ
LZ04	23238709	Coil, Peaking, TRF4270AJ
LZ05	23238716	Coil, Peaking, TRF4689AJ
LZ06	23238709	Coil, Peaking, TRF4270AJ
LZ07	23238709	Coil, Peaking, TRF4270AJ
LZ08	23238707	Coil, Peaking, TRF4390AJ
LZ09	70131060	Baze Filter, ZBF253D-00
LZ10	70131060	Baze Filter, ZBF253D-00
T401	23224371	Transformer, Horiz, Drive, TLN1080AH
△T461	23236537	Transformer, Flyback, TFB4142AR (2998DG)
△T461	23236536	Transformer, Flyback, TFB4141AR (3398DG)
T461A	23236447	ANODE4115B
T461B	23236447	ANODE4115B
T461C	23236447	ANODE4115B
T801	23211717	Line Filter, TRF3164AM
△T863	23217350	Transformer, Converter, TPW3367AR
SEMICONDUCTORS		
Q200	A6330059	Transistor, 2SC2482(C)
Q201	A6541130	Transistor, 2SA1162-Y
Q204	A6335470	Transistor, 2SC2712-Y
Q205	A6335470	Transistor, 2SC2712-Y
Q270	A6004040	Transistor, RN1404
Q271	A6004040	Transistor, RN1404
Q272	A6014040	Transistor, RN2404
Q273	A6335470	Transistor, 2SC2712-Y
Q301	23905610	IC, LA7846N
Q301B	70391355	Screw, BITTB3X8 SZN
Q302	B0384625	IC, TA8859CP
Q303	23114530	Transistor, 2SA933S-Q

Location No.	Part No.	Description
Q304	23114528	Transistor, 2SC1740S, Q
Q360	A6002040	Transistor, RN1204
Q361	A6002040	Transistor, RN1204
Q362	A6002050	Transistor, RN1205
Q370	A6534040	Transistor, 2SA1015-Y
Q402	A6325419	Transistor, 2SC2235-O(FA200)
Q404	A6371775	Transistor, 2SC5144
Q404B	A8012650	Spacer, AC263
Q404D	72471082	Screw, BRDT2W3X10 SZN
Q418	23314141	Transistor, 2SC3852
Q418B	70391355	Screw, BITTB3X8 SZN
Q420	23314141	Transistor, 2SC3852
Q420B	70391355	Screw, BITTB3X8 SZN
Q421	A6317440	Transistor, 2SC1815-Y
Q430	23314141	Transistor, 2SC3852
Q430B	70391355	Screw, BITTB3X8 SZN
Q460	23314850	Transistor, 2SA1788, E
Q460B	72471082	Screw, BRDT2W3X10 SZN
Q461	A6317440	Transistor, 2SC1815-Y
Q462	A6317440	Transistor, 2SC1815-Y
Q470	A6317440	Transistor, 2SC1815-Y
Q501	B0385990	IC, TA1259N
Q502	A6335470	Transistor, 2SC2712-Y
Q503	A6335470	Transistor, 2SC2712-Y
Q510	A6335470	Transistor, 2SC2712-Y
Q518	A6335470	Transistor, 2SC2712-Y
Q608	A6534040	Transistor, 2SA1015-Y
Q612	A6534040	Transistor, 2SA1015-Y
Q640	B0376856	IC, TA8211AH
Q640B	70391355	Screw, BITTB3X8 SZN
Q641	A6342200	Transistor, 2CS2878-A
Q642	A6342200	Transistor, 2CS2878-A
Q670	B0377308	IC, TA8256BH
Q670B	70391355	Screw, BITTB3X8 SZN
Q671	A6342200	Transistor, 2CS2878-A
Q672	A6342200	Transistor, 2CS2878-A
Q673	A6342200	Transistor, 2CS2878-A
Q688	A6002040	Transistor, RN1204
Q705	A6317440	Transistor, 2SC1815-Y
Q706	A6317440	Transistor, 2SC1815-Y
Q707	A6734590	Transistor, 2SC752(G)TM-Y
Q709	A6317440	Transistor, 2SC1815-Y
Q710	A6534040	Transistor, 2SA1015-Y
Q711	23314911	Transistor, 2SB1569A E
Q711B	70391355	Screw, BITTB3X8 SZN
Q712	23314914	Transistor, 2SD2400A E
Q712B	70391355	Screw, BITTB3X8 SZN
Q719	A6319300	Transistor, 2SC1959-Y
Q801	23905084	IC, STR-S6709, L
Q801B	72471082	Screw, BRDT2W3X10 SZN
Q802	23314141	Transistor, 2SC3852
△Q826	A8643108	Photo Coupler, TLP621(GR-LF)
Q832	23314141	Transistor, 2SC3852
Q832B	70391355	Screw, BITTB3X8 SZN
Q833	23314141	Transistor, 2SC3852
Q833B	70391355	Screw, BITTB3X8 SZN
Q840	23318299	IC, L78MR05
Q840B	70391355	Screw, BITTB3X8 SZN
Q901	A6368700	Transistor, 2CS4544
Q901B	70391355	Screw, BITTB3X8 SZN
Q902	A6317440	Transistor, 2SC1815-Y
Q903	A6368700	Transistor, 2CS4544
Q903B	70391355	Screw, BITTB3X8 SZN
Q904	A6317440	Transistor, 2SC1815-Y

Location No.	Part No.	Description
Q905	A6368700	Transistor, 2CS4544
Q905B	70391355	Screw, BITTB3X8 SZN
Q906	A6317440	Transistor, 2SC1815-Y
Q907	A6509140	Transistor, 2SA562TM-Y
Q908	A6321240	Transistor, 2SC2120-Y
Q910	A6317440	Transistor, 2SC1815-Y
Q911	A6317440	Transistor, 2SC1815-Y
Q912	A6534040	Transistor, 2SA1015-Y
Q913	A6534040	Transistor, 2SA1015-Y
Q914	A6317440	Transistor, 2SC1815-Y
Q4321	A6002040	Transistor, RN1204
Q4420	23316816	IC, LA7860
Q4421	A6002040	Transistor, RN1204
Q4423	A6325419	Transistor, 2SC2235-O(FA200)
QA01	23000176	IC, TMP87CS38N-ID20 (2998DG)
QA01	23906592	IC, TMP87CS38N-3567 (3398DG)
QA02	23905320	IC, NM24C16EN
QA03	A6534040	Transistor, 2SA1015-Y
QA05	A6734590	Transistor, 2SC752(G)TM-Y
QB01	A6317440	Transistor, 2SC1815-Y
QB03	A6002050	Transistor, RN1205
QB30	A6317440	Transistor, 2SC1815-Y
QB81	A6342200	Transistor, 2CS2878-A
QB82	A6342200	Transistor, 2CS2878-A
QB83	A6534040	Transistor, 2SA1015-Y
QB92	A6317440	Transistor, 2SC1815-Y
QB93	A6534040	Transistor, 2SA1015-Y
QB94	A6534040	Transistor, 2SA1015-Y
QB95	A6534040	Transistor, 2SA1015-Y
QB96	A6534040	Transistor, 2SA1015-Y
QD01	B0413738	IC, TC9337F-024
QD20	A6030620	IC, TC7S04F
QD30	B0385643	IC, TA1216AN
QF01	23906822	IC, SDA5273-2S C
QF03	A6317440	Transistor, 2SC1815-Y
QF04	A6734590	Transistor, 2SC752(G)TM-Y
QQ01	B0385755	IC, TA1229N
QQ02	B0383881	IC, TA8772AN
QQ03	A6335470	Transistor, 2SC2712-Y
QQ04	A6335470	Transistor, 2SC2712-Y
QR01	B0386235	IC, TA1287P
QR21	A6335470	Transistor, 2SC2712-Y
QR23	A6335470	Transistor, 2SC2712-Y
QS01	A6359870	Transistor, 2SC3326-B
QS02	A6359870	Transistor, 2SC3326-B
QS03	A6335470	Transistor, 2SC2712-Y
QS04	A6335470	Transistor, 2SC2712-Y
QS05	A6359870	Transistor, 2SC3326-B
QS06	A6359870	Transistor, 2SC3326-B
QS07	A6014040	Transistor, RN2404
QS08	A6359870	Transistor, 2SC3326-B
QS09	A6359870	Transistor, 2SC3326-B
QV01	B0385650	IC, TA1218N
QV02	A6317440	Transistor, 2SC1815-Y
QV02	A6335470	Transistor, 2SC2712-Y
QV06	A6541130	Transistor, 2SA1162-Y
QV07	A6359870	Transistor, 2SC3326-B
QV08	A6335470	Transistor, 2SC2712-Y
QV09	A6317440	Transistor, 2SC1815-Y
QV10	A6335470	Transistor, 2SC2712-Y
QV11	A6335470	Transistor, 2SC2712-Y
QV12	A6317440	Transistor, 2SC1815-Y

Location No.	Part No.	Description
QV14	A6317440	Transistor, 2SC1815-Y
QV15	A6359870	Transistor, 2SC3326-B
QX01	23906921	IC, TC90A61F
QX02	23906657	IC, MB81G163222
QX03	23905013	IC, TLC29321PW
QX04	A6030620	IC, TC7S04F
QX05	23906951	IC, SN74AHCT1G32
QX07	23905939	IC, TLC2933IPW
QX08	A6030620	IC, TC7S04F
QX09	23906951	IC, SN74AHCT1G32
QX10	23906951	IC, SN74AHCT1G32
QX11	23906318	IC, ADS932E
QX12	23906318	IC, ADS932E
QX13	B0489209	IC, TC74ACT74F
QX14	A6335470	Transistor, 2SC2712-Y
QX15	70128490	IC, MM1031XMR
QX16	23314345	Transistor, IMZ1 T108
QX17	A6335470	Transistor, 2SC2712-Y
QX18	A6541130	Transistor, 2SA1162-Y
QX19	A6541130	Transistor, 2SA1162-Y
QX20	A6030670	IC, TC7S66F
QX21	A6335470	Transistor, 2SC2712-Y
QX22	23314347	Transistor, IMX2 T108
QX23	A6335470	Transistor, 2SC2712-Y
QX24	23314344	Transistor, IMX1 T110
QX25	A6030670	IC, TC7S66F
QX26	A6541130	Transistor, 2SA1162-Y
QX27	A6030670	IC, TC7S66F
QX28	A6335470	Transistor, 2SC2712-Y
QX29	23314347	Transistor, IMX2 T108
QX30	A6335470	Transistor, 2SC2712-Y
QX31	23314344	Transistor, IMX1 T110
QX32	A6030670	IC, TC7S66F
QX33	A6541130	Transistor, 2SA1162-Y
QX34	A6030670	IC, TC7S66F
QX35	A6335470	Transistor, 2SC2712-Y
QX36	A6541130	Transistor, 2SA1162-Y
QX37	A6335470	Transistor, 2SC2712-Y
QX38	A6335470	Transistor, 2SC2712-Y
QX39	A6335470	Transistor, 2SC2712-Y
QX40	23314347	Transistor, IMX2 T108
QX41	A6335470	Transistor, 2SC2712-Y
QX42	A6335470	Transistor, 2SC2712-Y
QX43	23314347	Transistor, IMX2 T108
QX44	A6335470	Transistor, 2SC2712-Y
QX45	A6335470	Transistor, 2SC2712-Y
QX46	23314347	Transistor, IMX2 T108
QX47	A6335470	Transistor, 2SC2712-Y
QX48	A6335470	Transistor, 2SC2712-Y
QX49	A6030871	IC, TC7W04F(BRA)
QX50	B0485484	IC, TC74HCT541AF
QX51	23906770	IC, BA033FP-E2
QX52	A6030695	IC, TC7SH32FU(BR
QX53	A6030695	IC, TC7SH32FU(BR
QX55	B0370000	IC, TA78L05F
QZ01	B0410688	IC, TC9090AN
QZ02	A6335470	Transistor, 2SC2712-Y
QZ03	A6335470	Transistor, 2SC2712-Y
QZ04	A6335470	Transistor, 2SC2712-Y
QZ06	A6335470	Transistor, 2SC2712-Y
D101	23316411	Diode, Zener, HZT33-12
D201	23118041	Diode, MA111-(TX)
D240	23115599	Diode, 1N4148
D301	23118479	Diode, BYD33J

Location No.	Part No.	Description
D302	23118479	Diode, BYD33J
D303	23316794	Diode, SC570ALFE2
D306	23115599	Diode, 1N4148
D312	23115599	Diode, 1N4148
D370	23316652	Diode, Zener, MTZJ2.7A
D371	23115599	Diode, 1N4148
D404	23357043	Diode, FMQ-G5GS
D404B	72471082	Screw, BRDT2W3X10 SZN
D406	23118479	Diode, BYD33J
D418	23316749	Diode, Zener, MTZJ30A
D419	23316716	Diode, Zener, MTZJ11B
D420	23316716	Diode, Zener, MTZJ11B
D421	23316680	Diode, Zener, MTZJ7.5A
D422	23316726	Diode, Zener, MTZJ15C
D431	23316678	Diode, Zener, MTZJ6.8B
D432	23316678	Diode, Zener, MTZJ6.8B
D436	23115599	Diode, 1N4148
D441	23316687	Diode, Zener, MTZJ9.1B
D460	23118479	Diode, BYD33J
D461	23316582	Diode, ERC20-06
D461B	70391355	Screw, BITTB3X8 SZN
D463	23115599	Diode, 1N4148
D464	23316718	Diode, Zener, MTZJ12A
D466	23316672	Diode, Zener, MTZJ5.6B
D467	23118479	Diode, BYD33J
D468	23316718	Diode, Zener, MTZJ12A
D474	23316719	Diode, Zener, MTZJ12B
D488	23115599	Diode, 1N4148
D490	23115599	Diode, 1N4148
D501	23115599	Diode, 1N4148
D502	23115599	Diode, 1N4148
D610	23115599	Diode, 1N4148 (3398DG)
D611	23115599	Diode, 1N4148
D612	23115599	Diode, 1N4148
D613	23115599	Diode, 1N4148
D614	23115599	Diode, 1N4148
D624	23115599	Diode, 1N4148
D625	23115599	Diode, 1N4148
D626	23115599	Diode, 1N4148
D627	23115599	Diode, 1N4148
D628	23115599	Diode, 1N4148
D630	23115599	Diode, 1N4148
D640	23115599	Diode, 1N4148
D641	23115599	Diode, 1N4148
D642	23115599	Diode, 1N4148
D643	23115599	Diode, 1N4148
D670	23115599	Diode, 1N4148
D671	23115599	Diode, 1N4148
D674	23115599	Diode, 1N4148
D675	23115599	Diode, 1N4148
D684	23115599	Diode, 1N4148 (3398DG)
D704	23115599	Diode, 1N4148
D705	23115599	Diode, 1N4148
D715	23115599	Diode, 1N4148
D721	23115599	Diode, 1N4148
D801	23357041	Diode, LN6SB60-F05
D803	23118479	Diode, BYD33J
D804	23316678	Diode, Zener, MTZJ6.8B
D805	23115599	Diode, 1N4148
D806	23118479	Diode, BYD33J
D808	23118479	Diode, BYD33J
D809	23316672	Diode, Zener, MTZJ5.6B
D810	23115599	Diode, 1N4148
D811	23115599	Diode, 1N4148

Location No.	Part No.	Description
D812	23118451	Diode, RU-4A LF-L1
D815	23316725	Diode, Zener, MTZJ15B
D828	23115599	Diode, 1N4148
D883	23316406	Diode, FML-G16S
D883B	70391355	Screw, BITTB3X8 SZN
D885	23316642	Diode, YG911S2R
D885B	70391355	Screw, BITTB3X8 SZN
D891	23316642	Diode, YG911S2R
D891B	70391355	Screw, BITTB3X8 SZN
D892	23118052	Diode, RU4Z LF-L1
D893	23316672	Diode, Zener, MTZJ5.6B
D895	23316673	Diode, Zener, MTZJ5.6C
D896	23118479	Diode, BYD33J
D901	23115599	Diode, 1N4148
D903	23115599	Diode, 1N4148
D904	23115599	Diode, 1N4148
D905	23115599	Diode, 1N4148
D906	23115599	Diode, 1N4148
D907	23115599	Diode, 1N4148
D908	23115599	Diode, 1N4148
D909	23115599	Diode, 1N4148
D910	23115599	Diode, 1N4148
D911	23118479	Diode, BYD33J
D4301	23316726	Diode, Zener, MTZJ15C
DA01	23115599	Diode, 1N4148
DA02	23115599	Diode, 1N4148
DA03	23115599	Diode, 1N4148
DA04	23316726	Diode, Zener, MTZJ15C
DA42	23115599	Diode, 1N4148
DB01	23358505	Diode (LED), SLR56VC196F
DB02	23358503	Diode (LED), SCL003MC3FX
DB30	23115599	Diode, 1N4148
DF01	23316654	Diode, Zener, MTZJ3.0A
DR02	23316557	Diode, HSM221C, TL
DR03	23118351	Diode, Zener, RD4.7M-T1BB2
DV01	23118296	Diode, Zener, RD9.1M-T1BB2
DV02	23118296	Diode, Zener, RD9.1M-T1BB2
DV03	23118296	Diode, Zener, RD9.1M-T1BB2
DV04	23118296	Diode, Zener, RD9.1M-T1BB2
DV05	23118296	Diode, Zener, RD9.1M-T1BB2
DV06	23118296	Diode, Zener, RD9.1M-T1BB2
DV07	23118296	Diode, Zener, RD9.1M-T1BB2
DV10	23316557	Diode, HSM221C, TL
DV11	23316557	Diode, HSM221C, TL
DV12	23118296	Diode, Zener, RD9.1M-T1BB2
DV14	23118296	Diode, Zener, RD9.1M-T1BB2
DX201	A7238420	Diode, Zener, 02CZ5.1-Y
DX202	A7238420	Diode, Zener, 02CZ5.1-Y
DX203	A7238420	Diode, Zener, 02CZ5.1-Y
DX401	A7238420	Diode, Zener, 02CZ5.1-Y
DZ01	23118293	Diode, Zener, RD10MB2
MISCELLANEOUS		
B202	23470556	Frame, Terminal
B221	23037312	Screw, BTBW 3X12 SZN
B224	23037312	Screw, BTBW 3X12 SZN
BB03	23903022	Socket, 8P
BB04	23903022	Socket, 8P
BB05A	23368627	Plug, 8P
BB10	23903022	Socket, 8P
BB10A	23368627	Plug, 8P
BB11	23903022	Socket, 8P
BB11A	23368627	Plug, 8P
BB12	23903022	Socket, 8P

Location No.	Part No.	Description
BB12A	23368627	Plug, 8P
BB13	23903022	Socket, 8P
BB13A	23368627	Plug, 8P
BB14	23903022	Socket, 8P
BB14A	23368627	Plug, 8P
BB15	23903022	Socket, 8P
BB15A	23368627	Plug, 8P
BB50B	23903022	Socket, 8P
BB51B	23903022	Socket, 8P
BB52B	23903022	Socket, 8P
BB53B	23903022	Socket, 8P
BB54A	23903022	Socket, 8P
BB54B	23903022	Socket, 8P
△ F470	23144503	Fuse, 1.25A, 250V
F470A	23165433	Holder, Fuse
△ F801	23144507	Fuse, 3.15A, 250V
F801A	23165433	Holder, Fuse
△ F802	23144506	Fuse, 2.5A, 250V
F802A	23165433	Holder, Fuse
F889	23144458	Fuse, 5.0A, 250V
F889A	23165433	Holder, Fuse
G101	24366333	CF, 33k ohm
G299	24366103	CF, 10k ohm
G311	24366332	CF, 3300 ohm
G401	23103859	Coil (Ferrite Bead), TEM2011
G402	23103859	Coil (Ferrite Bead), TEM2011
G403	23103859	Coil (Ferrite Bead), TEM2011
G404	23103859	Coil (Ferrite Bead), TEM2011
G430	23115599	Diode, 1N4148
G510	23289479	Coil, Peaking, TRF44R7AF
G604	23103859	Coil (Ferrite Bead), TEM2011
G606	23103859	Coil (Ferrite Bead), TEM2011
G802	24321568	MF, 0.56 ohm, 1/2W
G826	23222694	Coil, Choke, TLN2026
GJ05	24000824	Chip Jumper, 2125Type
GJ06	24000824	Chip Jumper, 2125Type
GJ07	24000824	Chip Jumper, 2125Type
GJ08	24000824	Chip Jumper, 2125Type
GJ09	24000824	Chip Jumper, 2125Type
GJ25	24000824	Chip Jumper, 2125Type
GJ26	24000824	Chip Jumper, 2125Type
GJ30	24000824	Chip Jumper, 2125Type
GS01	24000824	Chip Jumper, 2125Type
GV05	23103832	Chip (Ferrite Bead), TEM2125M
GV07	24000824	Chip Jumper, 2125Type
GV08	24000824	Chip Jumper, 2125Type
GV11	24000824	Chip Jumper, 2125Type
GV12	24000824	Chip Jumper, 2125Type
GV13	24872681	Chip, 680 ohm, 1/16W
GV14	24000824	Chip Jumper, 2125Type
GV15	24000824	Chip Jumper, 2125Type
GV17	24000824	Chip Jumper, 2125Type
GV38	24000824	Chip Jumper, 2125Type
GV39	24000824	Chip Jumper, 2125Type
GV40	24000824	Chip Jumper, 2125Type
GV41	24872102	Chip, 1k ohm, 1/16W
GV97	24872101	Chip, 100 ohm, 1/16W
H002	23148347	Module, MVGS49D, IF FR MPX APRO IMA11 TECH
KB01	23904946	Remote Sensor, RPM-676CBR-S
P004	23161702	Terminal, 8P
P402A	23902780	Socket, B-B, 11P

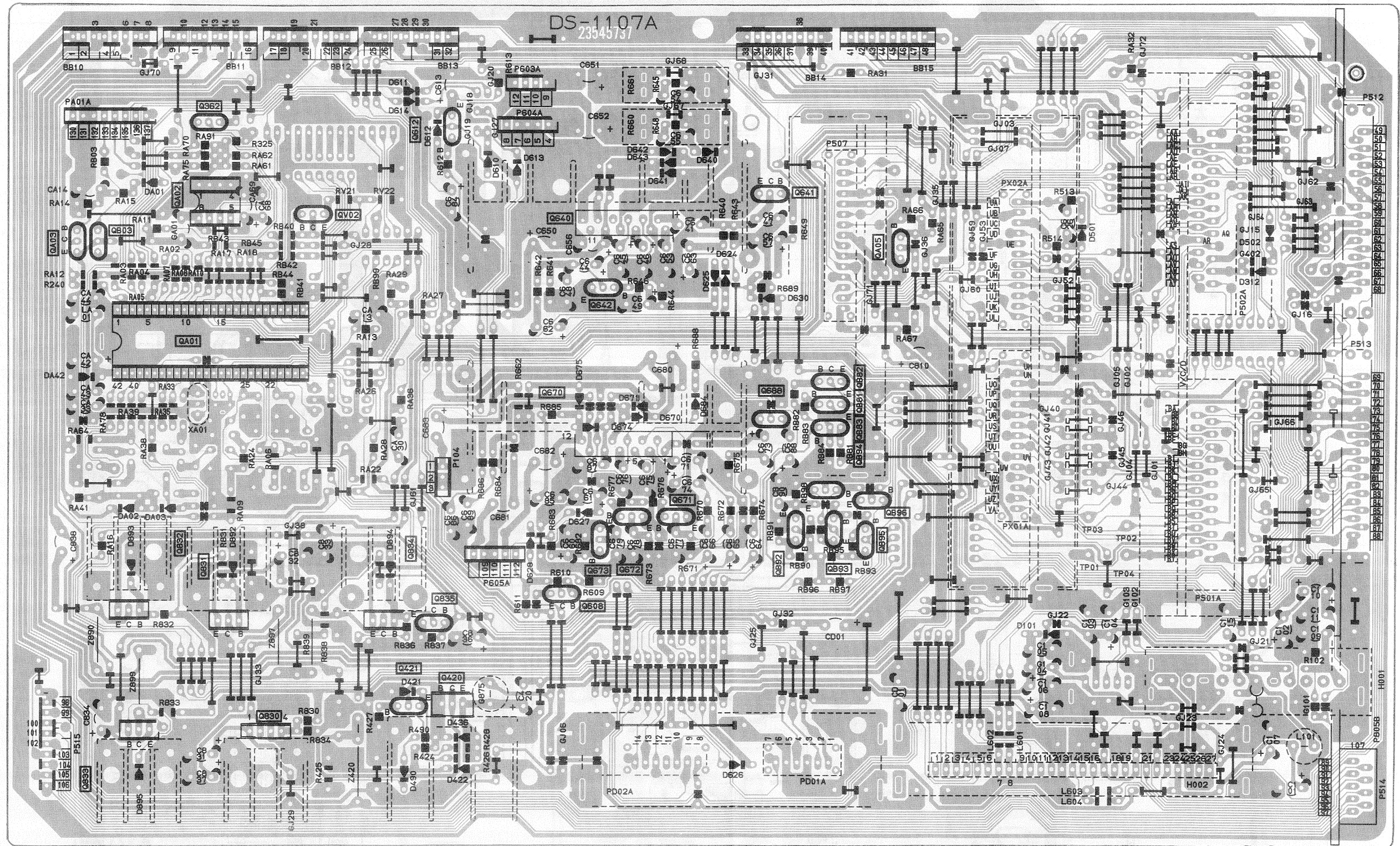
Location No.	Part No.	Description
P402B	23368530	Plug, B-B, 11P
P501A	23903025	Socket, 25P
P502A	23903025	Socket, 25P
P507	23902655	Socket, B-B, 15P
P512	23902863	Socket, 20P
P513	23902863	Socket, 20P
P661	23363607	Jack, Headphone
△ P801	23372014	Power Cord
PD01A	23902063	Socket, B-B, 6P
PD02A	23902852	Socket, B-B, 7P
PD30	23368005	Plug, B-B, 6P
PD31	23368511	Plug, B-B, 7P
PF01A	23367724	Plug, B-B, 15P
PH01	23902604	Socket, 21P
PH02	23902604	Socket, 21P
PH03	23902604	Socket, 21P
PU01	23368634	Plug, 25P
PU02	23368634	Plug, 25P
PV03	23365515	Jack, S-VHS, 4P
PV04	23363252	Jack, 1P Phono(Yel)
PV05	23365508	Jack, 2P Phono
PV10B	23368520	Plug, B-B, 20P
PV11B	23368520	Plug, B-B, 20P
PX01	23367724	Plug, B-B, 15P
PX01A	23902655	Socket, B-B, 15P
PX02	23368531	Plug, B-B, 12P
PX02A	23902781	Socket, B-B, 12P
S601	23145355	Switch, Slide, 4C-2P
△ S801	23344416	Switch, Power
SA01	23145430	Switch, Push, 1C1P
SA02	23145430	Switch, Push, 1C1P
SA03	23145430	Switch, Push, 1C1P
SA04	23145430	Switch, Push, 1C1P
SA06	23145430	Switch, Push, 1C1P
△ V901A	23902891	Socket, CRT, 10P
W008	23351002	Speaker, SPK-1276, 80X80mm, 8 ohm
W661	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm
W662	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm
W663	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm
W664	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm
W665	23351080	Speaker, SPK-1352, 100x100mm, 6 ohm
X401	23153721	Ceramic Resonator, 503kHz, TCR1023
X501	23153961	Crystal, 3.58MHz
X503	23153979	Crystal, 4.43MHz
XA01	23153325	Ceramic Resonator, 8.00MHz, TCR1056
XF01	23153421	Crystal, 20.48MHz
XQ01	23153969	Crystal, 4.00MHz
XV01	23107519	Ceramic Video Trap, 4.43MHz, TCF1066
△ Z420	23144539	Protector, PRF20005491, 125V, 2A
△ Z801	23904998	IC, HIC1016
△ Z890	23144539	Protector, PRF20005491, 125V, 2A
△ Z890	23144543	Protector, PRF50005491, 125V, 5A

Location No.	Part No.	Description
△ Z891	23144543	Protector, PRF50005491, 125V, 5A
△ Z899	23144539	Protector, PRF20005491, 125V, 2A
ZD01	23153671	Ceramic Resonator, 16.93MHz, TCR1034
ZT01	23153736	Ceramic Resonator, TCR1025
ZX101	23103852	Filter, TEM2028AH
ZX141	23103852	Filter, TEM2028AH
ZX161	23103852	Filter, TEM2028AH
ZX201	23103823	Filter, TEM2027D
ZX202	23103823	Filter, TEM2027D
ZX321	23103823	Filter, TEM2027D
ZX341	23103823	Filter, TEM2027D
ZX361	23103823	Filter, TEM2027D
ZX401	23303181	Filter, TEM1012N
ZX402	23303181	Filter, TEM1012N
PC BOARD ASSEMBLIES		
* U101A	23706499	CHIP DOLBY Board, PB7205X
* U105	23784005	DIGITAL-SCAN Board, PB8826B
* U901	23783841	CRT Drive Board, PB7212 (2998DG)
* U901	23784019	CRT Drive Board, PB7212B (3398DG)
* U902A	23783730	Signal Board, PB8169A (2998DG)
* U902A	23784010	Signal Board, PB8169B (3398DG)
* U903	23783839	Power Board, PB8306A (2998DG)
* U903	23784006	Power Board, PB8306B (3398DG)
* U904	23783842	DEF Board, PB8087(2998DG)
* U904	23784007	DEF Board, PB8087B(3398DG)
* U905	23781841	EW100HZ Board, PB8061X
* U906A	23781874	CONT-1 Board, PB8073X-1
* U906B	23781892	CONT-2 Board, PB8073X-2
* U907	23781768	TEXT Board, PB6513Z
* U908	23783168	BACK-T Board, PB8058
* U909	23783840	VCD Board, PB8059A (2998DG)
* U909	23782838	VCD Board, PB8059X (3398DG)
PICTURE TUBE		
△ V901	23312774	Pictuer Tube, A66ESF002X143 (2998DG)
△ V901	23312729	Pictuer Tube, A80EFF002X43 (3398DG)
TUNER		
H001	23321316	Tuner, EGA21LX2
ACCESSORIES		
K902	23306217	Remote Hand Unit, CT-9901
AT04	23305572	Battery Cover
Y101	23563737	Owner's Manual, English, 2998DG/3398DG
CABINET PARTS		
A201S	23549704	Front Cover (2998DG)
A201S	23549691	Front Cover (3398DG)

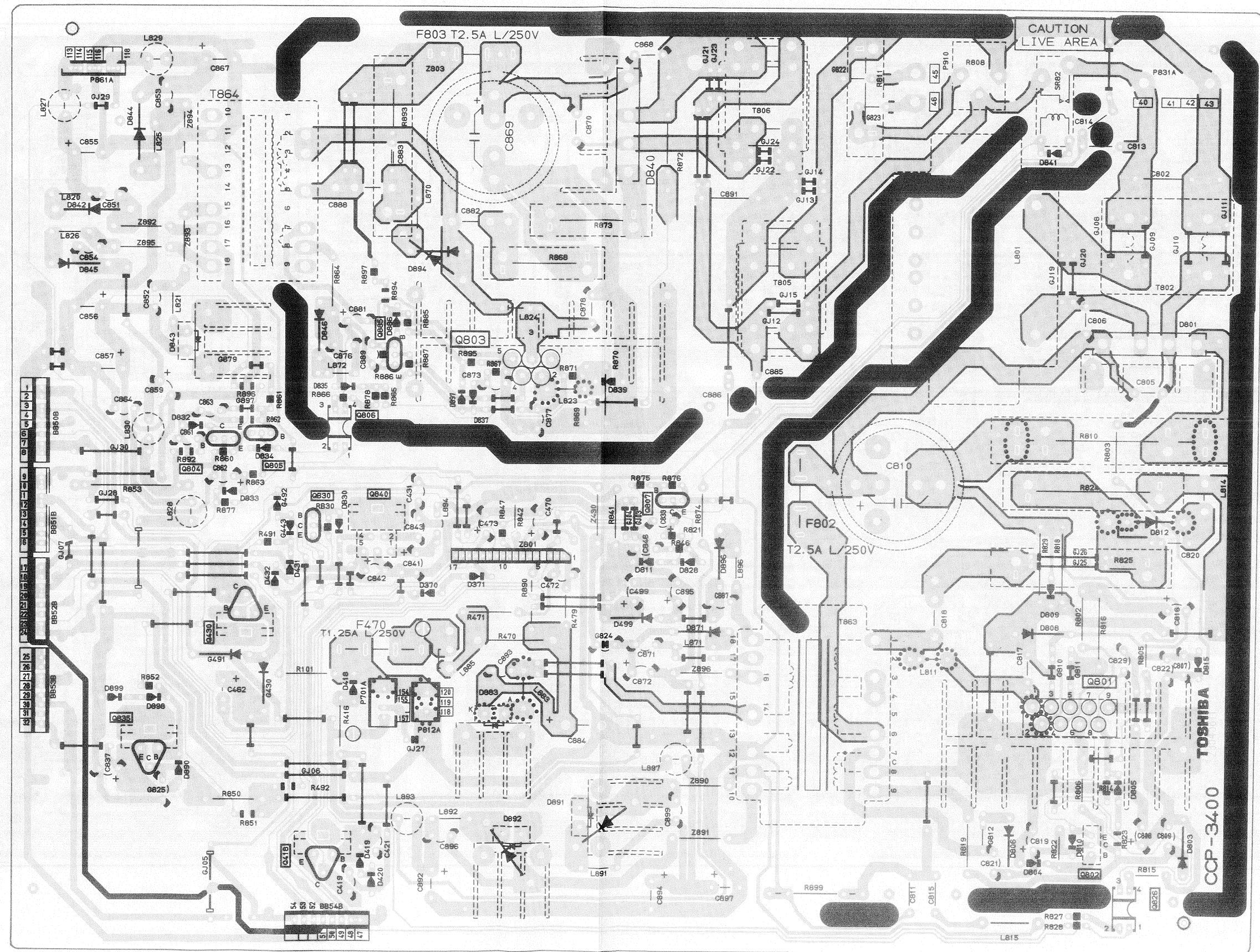
Location No.	Part No.	Description
A214	23035412	Screw, BTB4X12SZN
A215	23035412	Screw, BTB4X12SZN
A231	23445186	Button, Power
A235	23432984	Mark
A236	23519932	Speaker Grille (L/R)
A238	23519933	Speaker Grille (CENTRE)
A241	70368125	Push Catch for Door
A242	23427455	Door (Right)
A245	23430453	Button (Key)
A248	23460971	Trim (Key)
A340	23410676	Speaker Box (Front)
A341	23426411	Speaker Box (Back)
A343	23948114	Speaker Wire Assy
A344	23466653	Bushing
A345	23421715	Plug
A346	23035310	Screw, BTB3X10SZN
△ A401	23427431	Back Cover (2998DG)
△ A401	23427430	Back Cover (3398DG)
A403	23796410	Woofer Box
A420	23460965	Trim (Back Terminal)
A501	23030187	Screw, CRT5X30BLUNT
A702	23935766	Packing, Bottom (2998DG)
A702	23935771	Packing, Bottom (3398DG)
A703	23935767	Packing, Top (2998DG)
A703	23935772	Packing, Top (3398DG)
A741	23560820	Label

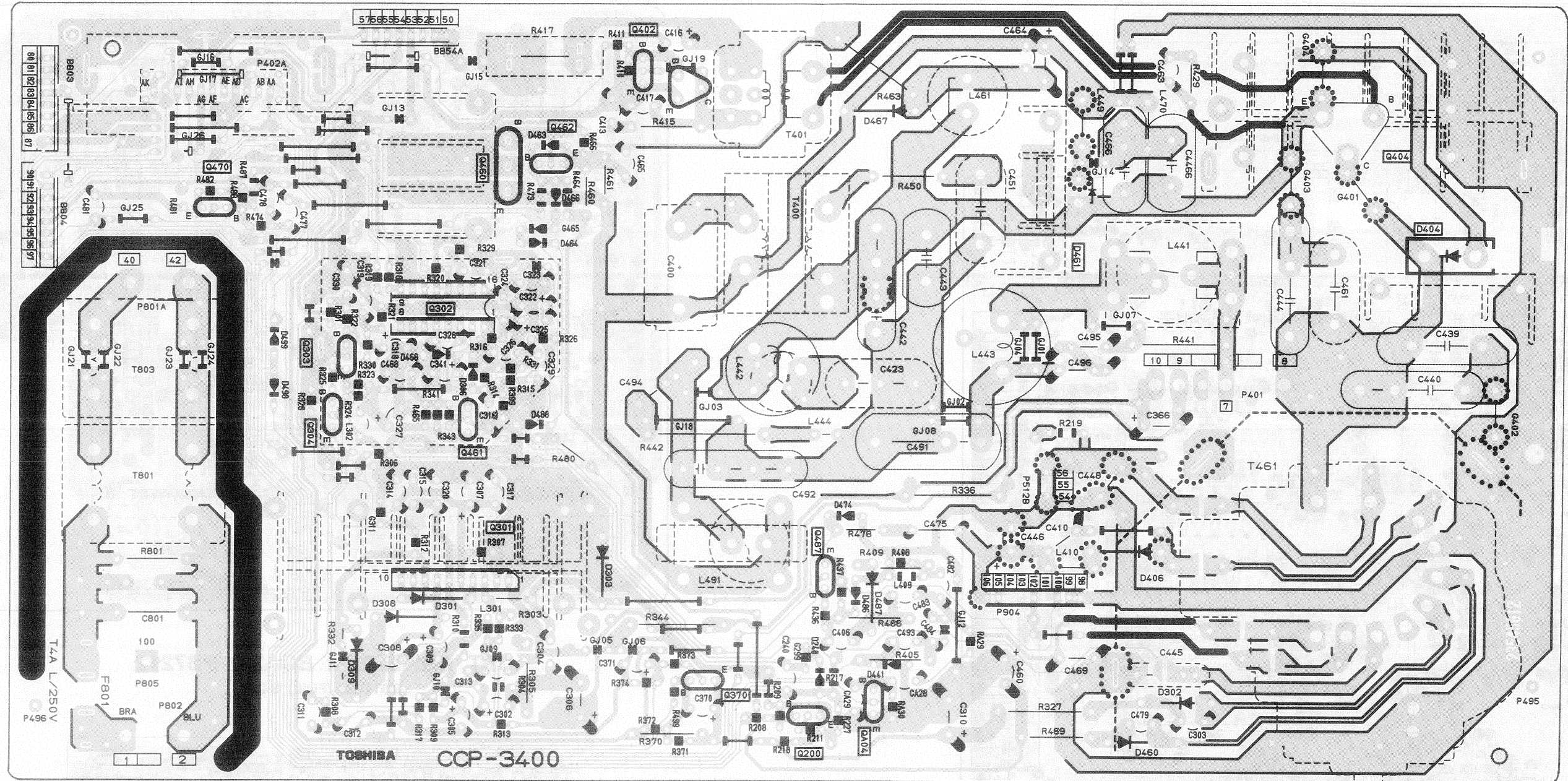
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SIGNAL BOARD PB8169A BOTTOM (FOIL) SIDE

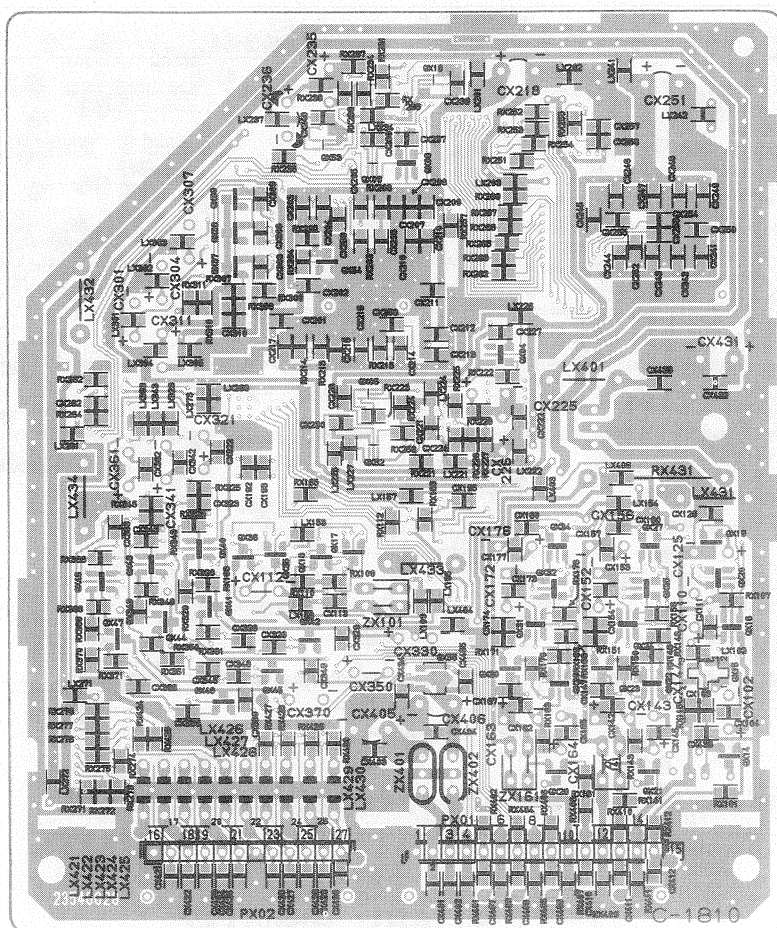


POWER BOARD PB8306A
BOTTOM (FOIL) SIDE

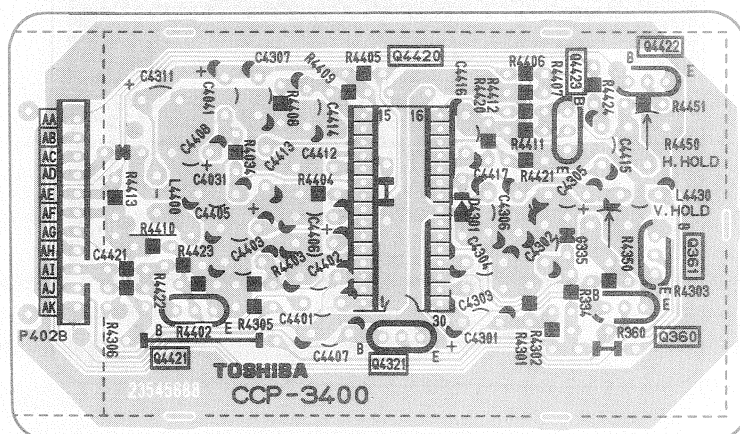




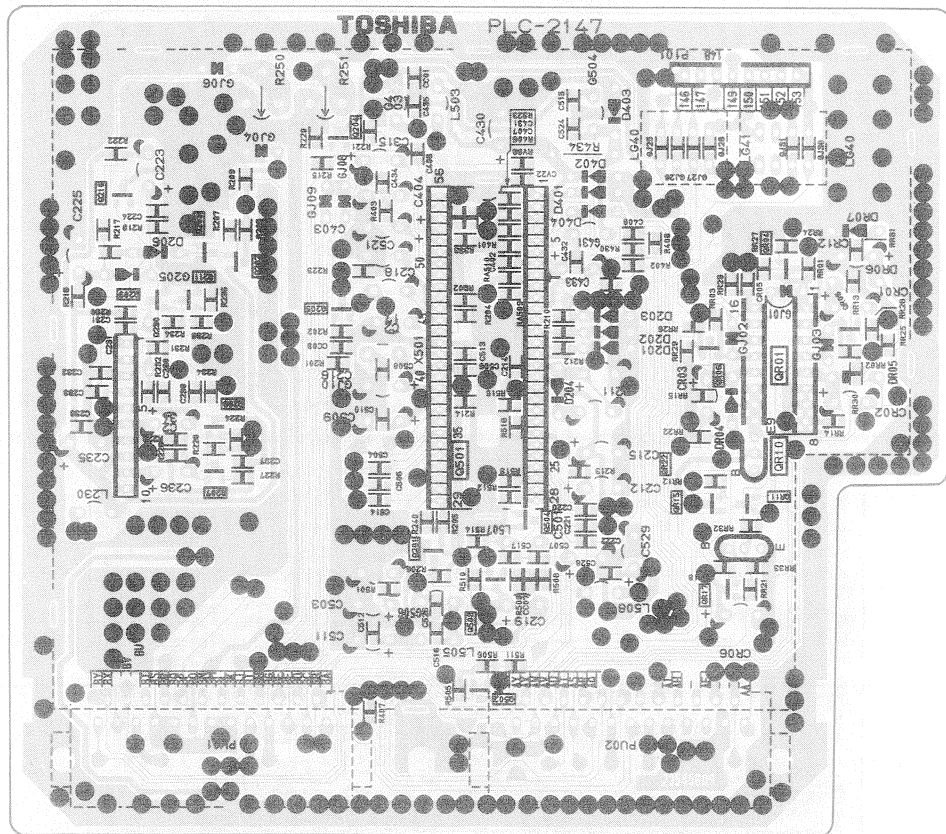
BOTTOM (FOIL) SIDE



BOTTOM (FOIL) SIDE

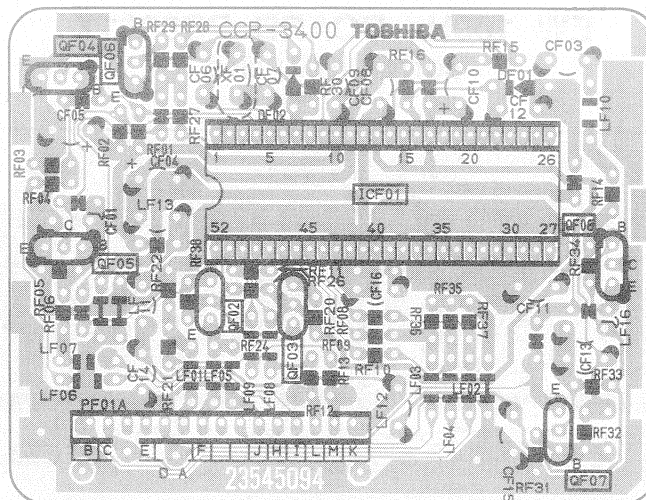


BOTTOM (FOIL) SIDE

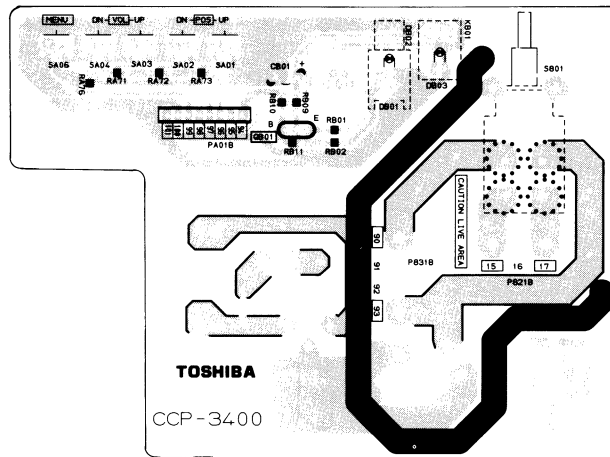


TEXT BOARD PB6513Z

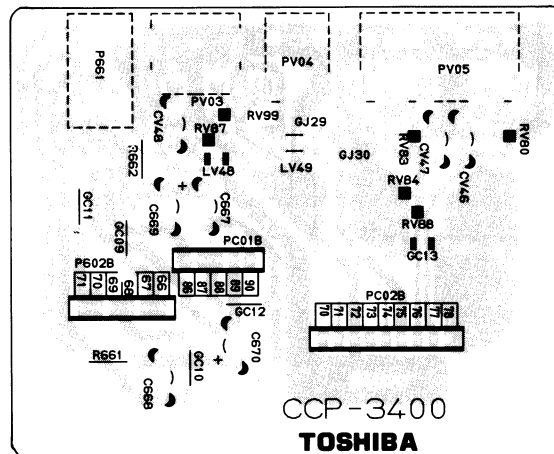
BOTTOM (FOIL) SIDE



CONT BOARD PB8073X-1 **BOTTOM (FOIL) SIDE**

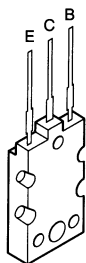


CONT-2 BOARD PB8073X-2 **BOTTOM (FOIL) SIDE**

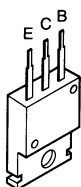


TERMINAL VIEW OF TRANSISTORS

① 2SD2253
(old)
2SC5243



② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



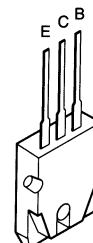
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



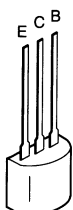
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



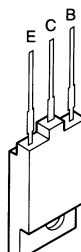
⑤ 2SA1788



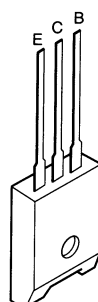
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SC5143



⑧ ON4409



SPECIFIC INFORMATIONS

SCHEMATIC DIAGRAM

MODEL : 2998DG (6/9)
3398DG

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

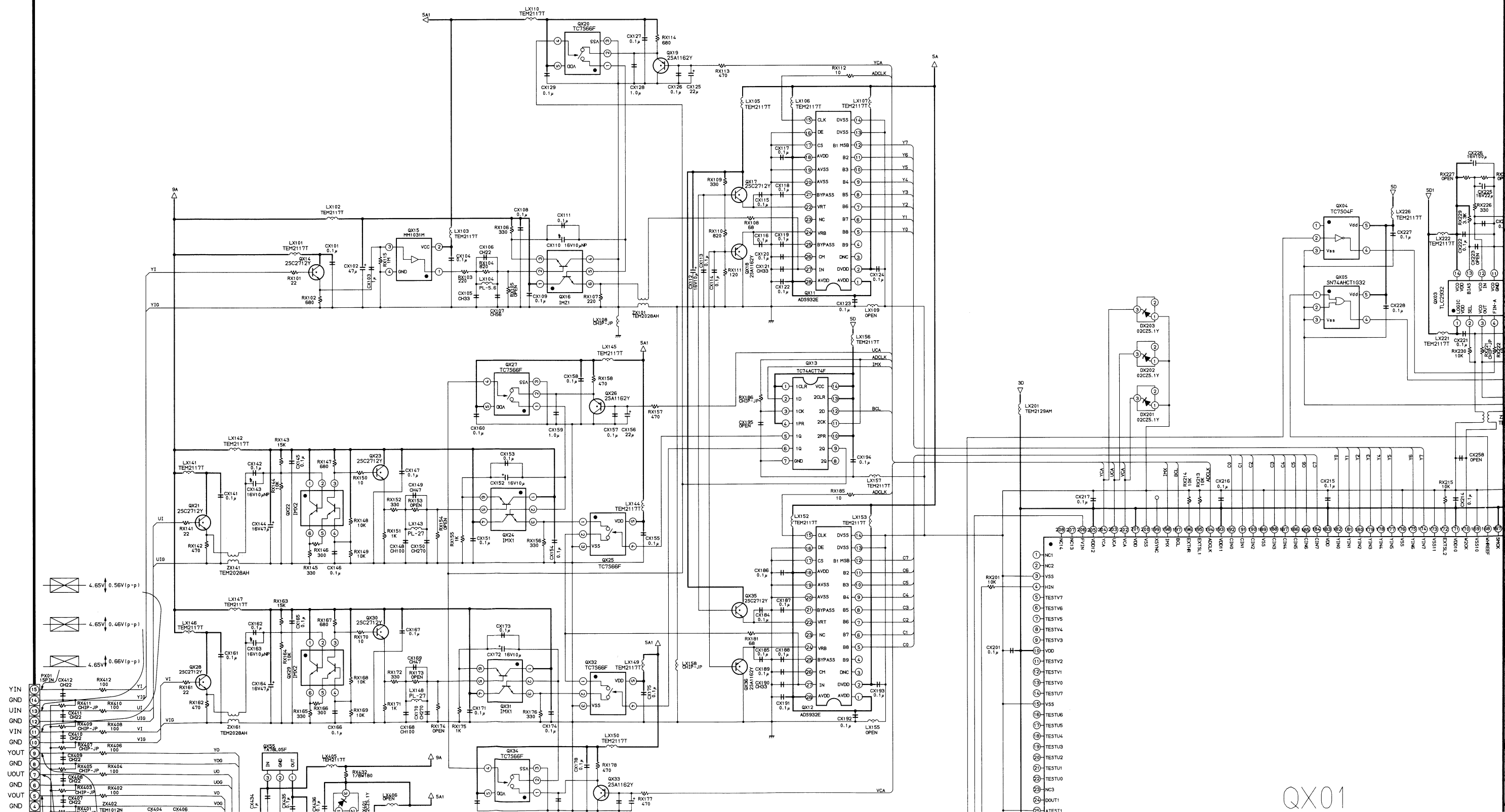
OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transformer is shown in the parts list. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ● : Solder links.

DIGITAL-SCAN BOARD PB8826B



VOLTAGES AND WAVEFORMS

With VTVM from point shown to chassis ground, line voltage 220 signal. Voltages reading may vary $\pm 20\%$.
 e taken using a wide band oscilloscope and a low capacity probe.
 taken using a standard colour bar signal.
 CONTRAST and COLOUR controls are in mid position and
 control is almost in maximum position. Set other controls for best

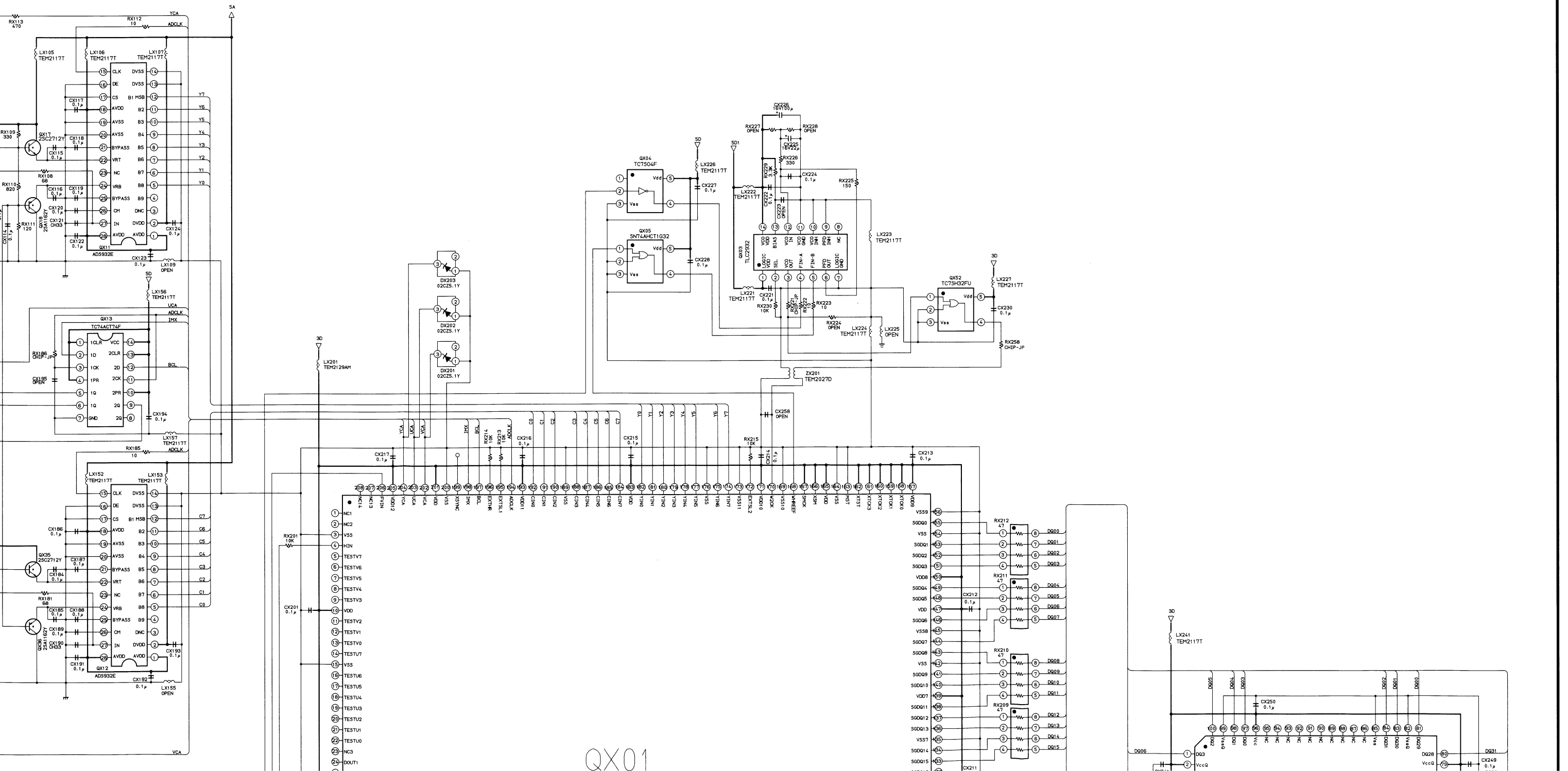
NOTES:

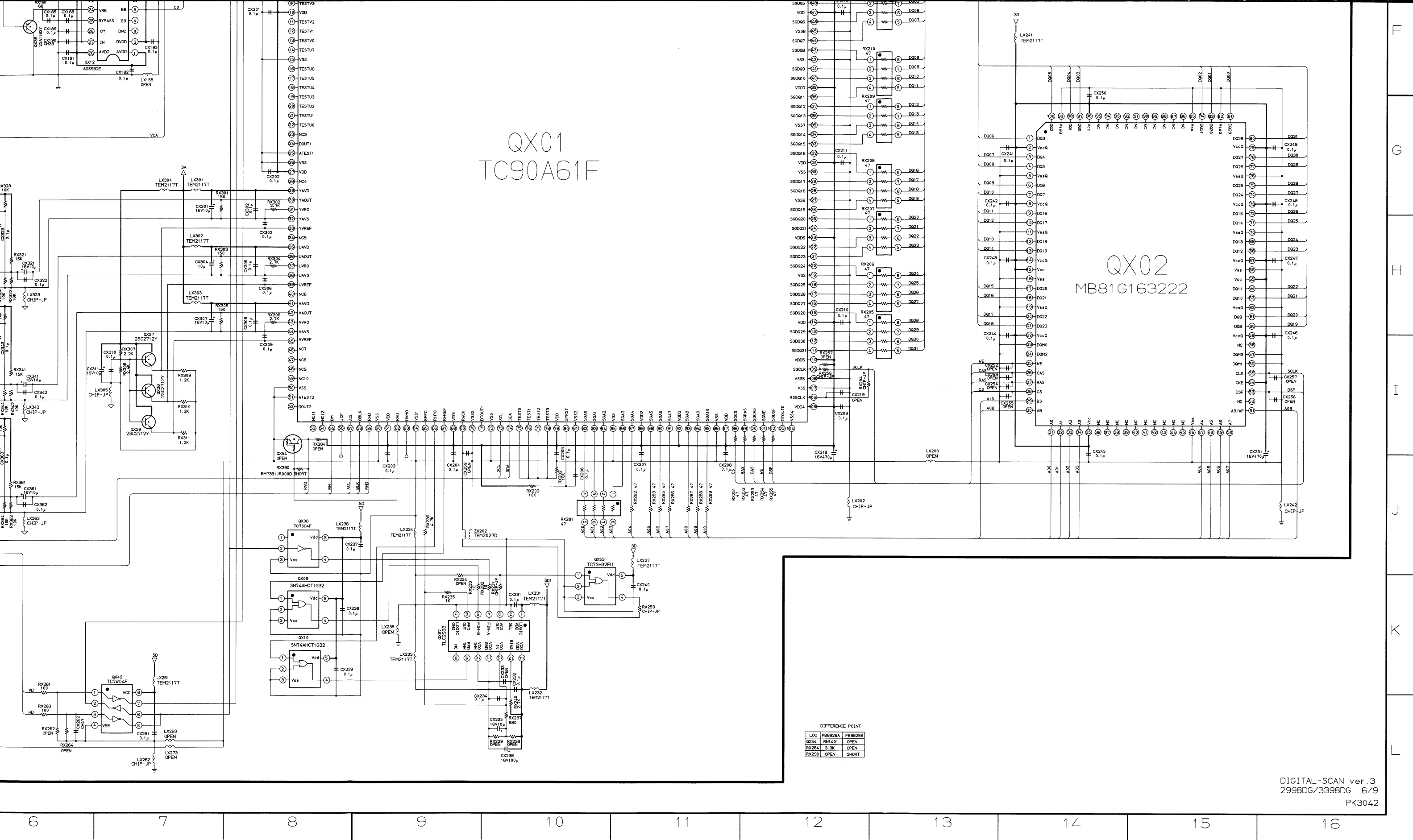
1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. $\bullet$: Solder links.

EXPRESSION

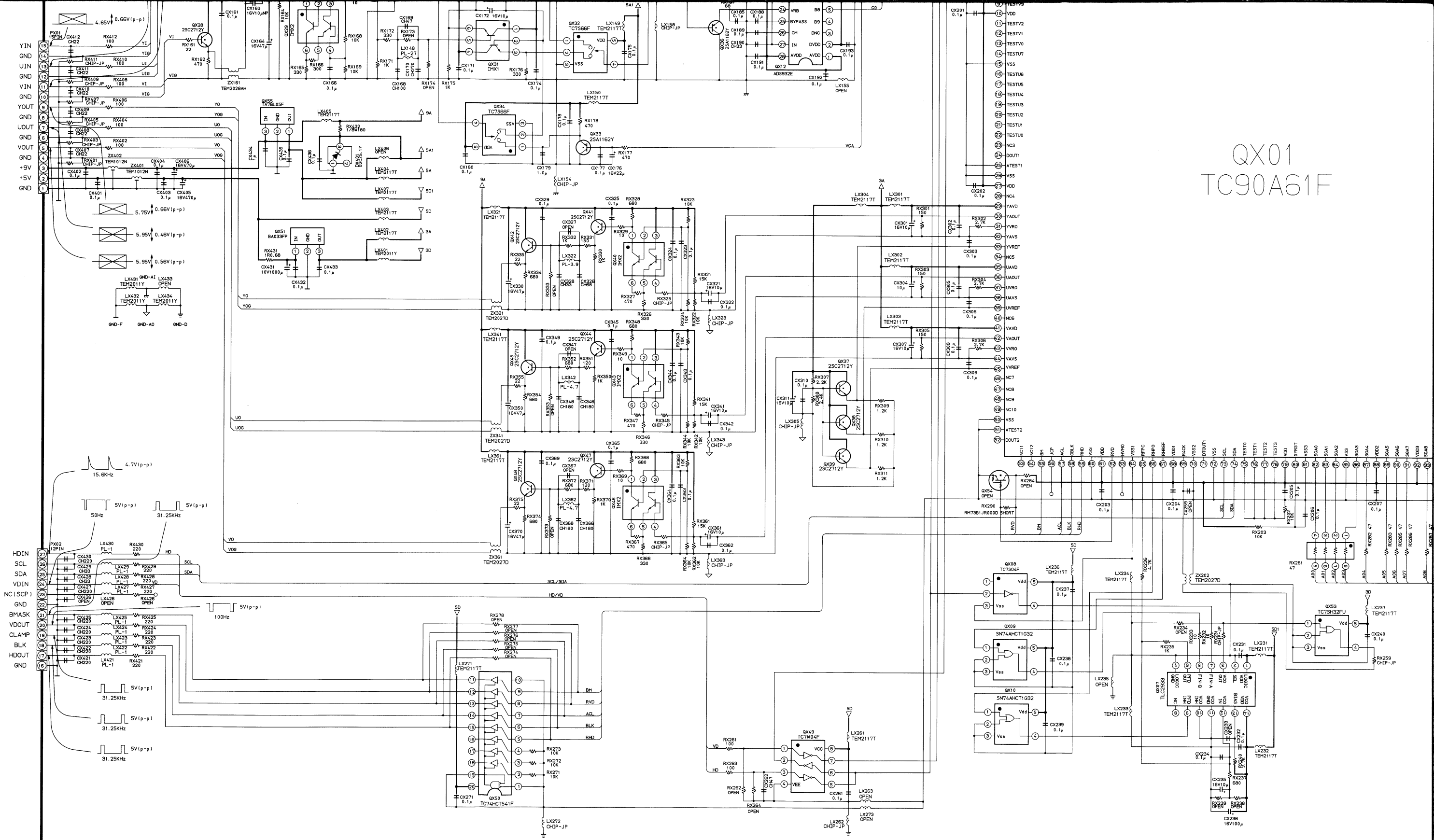
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.





F
G
H
I
J
K
L



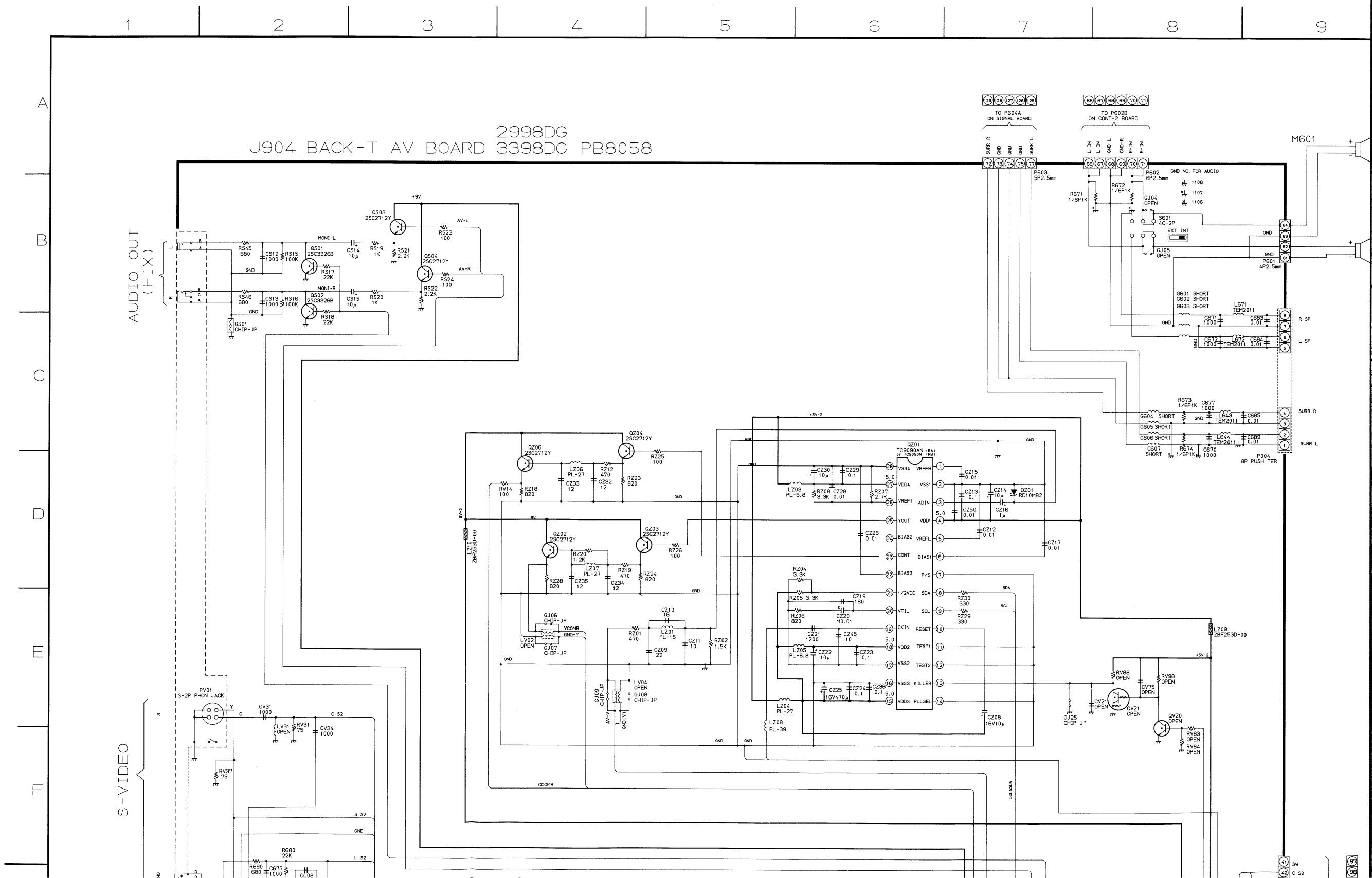
SCHEMATIC DIAGRAM

MODEL : 3398DG (9/9)

CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

- OBSERVATION OF VOLTAGES AND WAVEFORMS**
- 1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
 - 2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
 - 3. Waveforms are taken using a standard colour bar signal.
 - 4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

- NOTES:**
- 1. D.C. resistance value of a principal transistor. These are measured for separated from the circuit.
 - 2. The circuits are subject to change without notice.
 - 3. ● : Solder links.

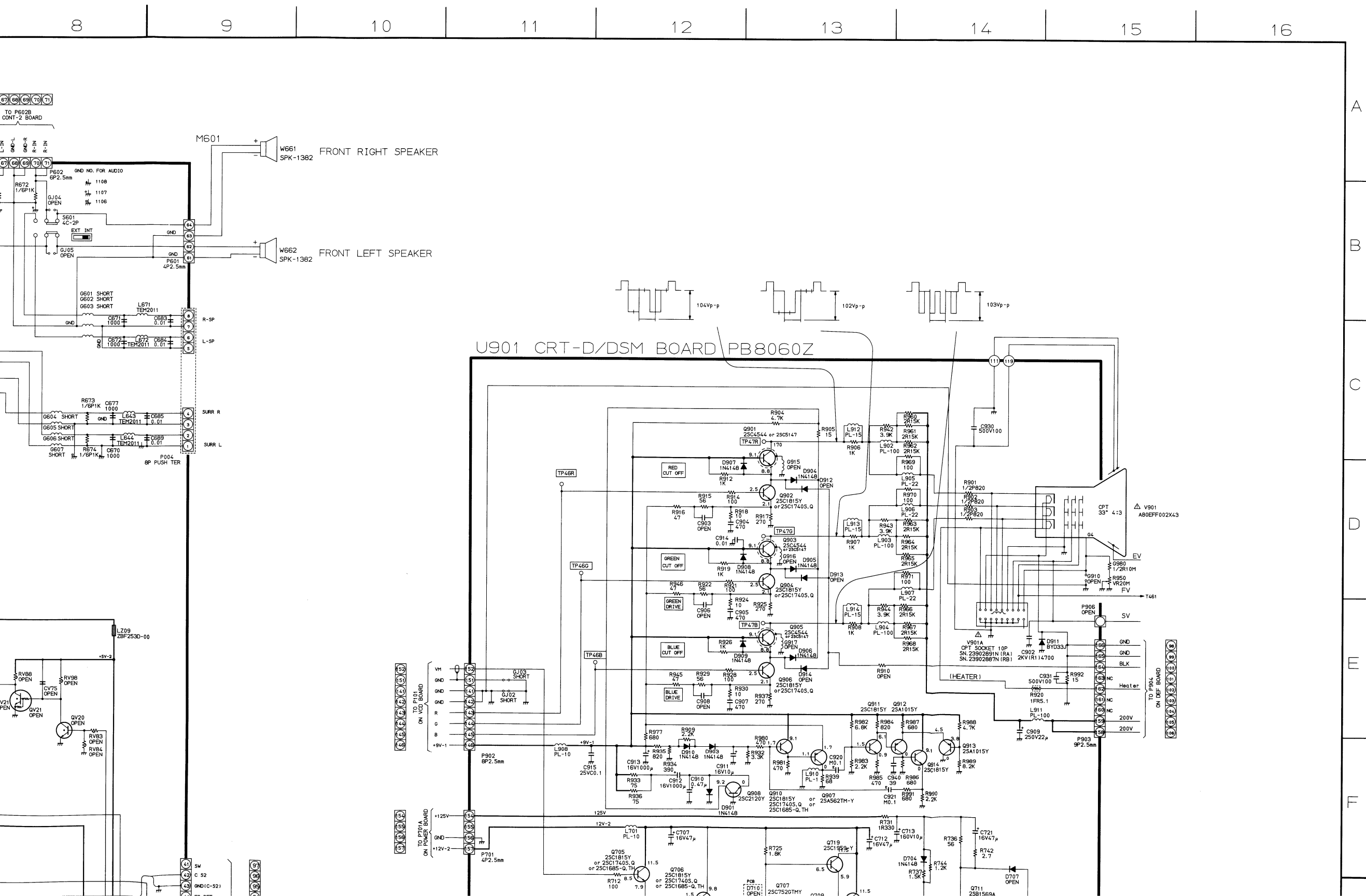


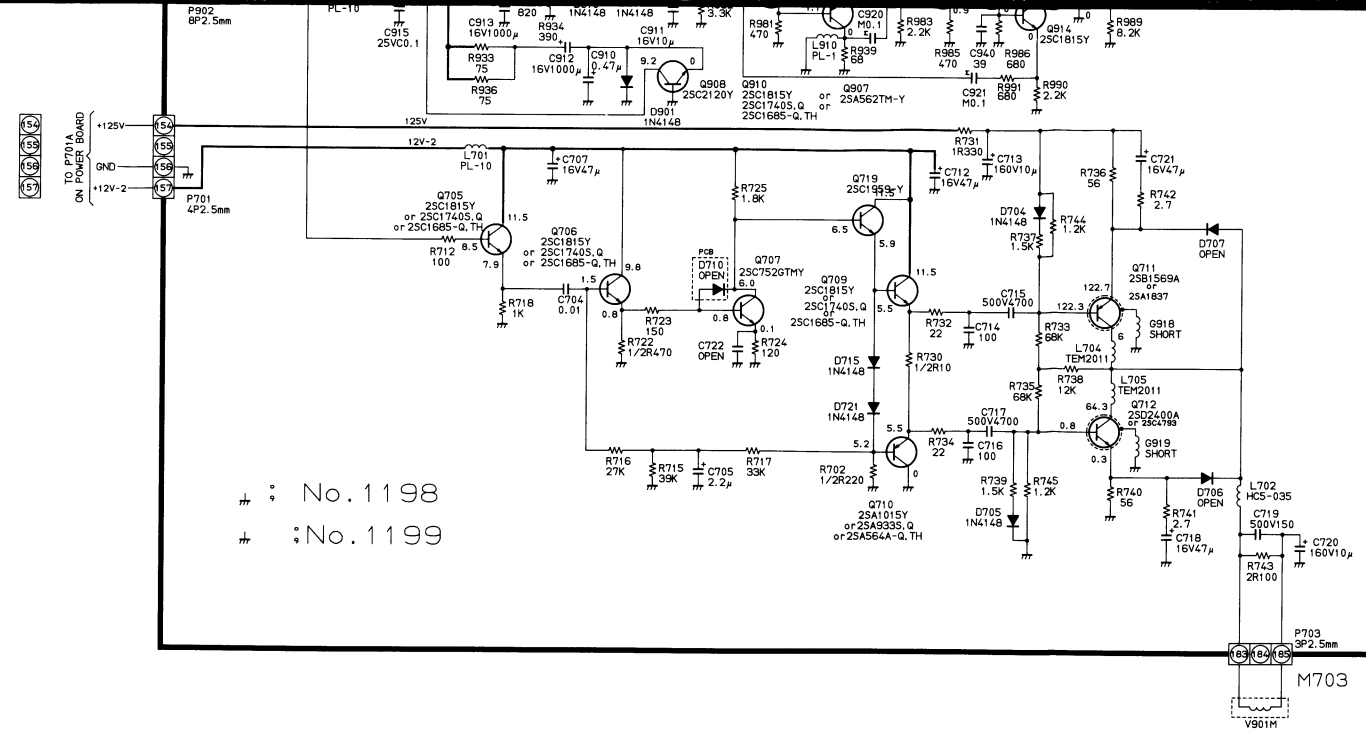
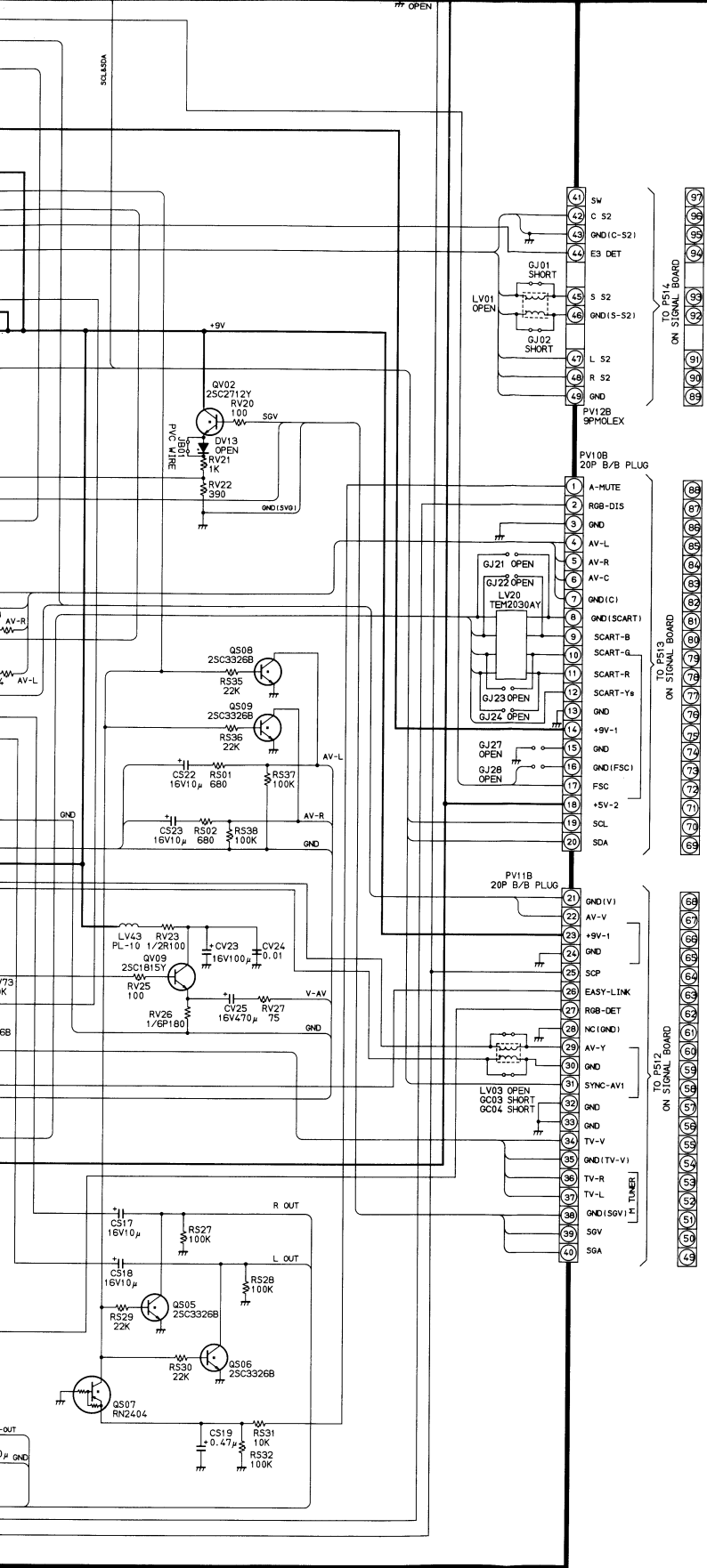
NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3.  : Solder links.

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.





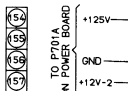
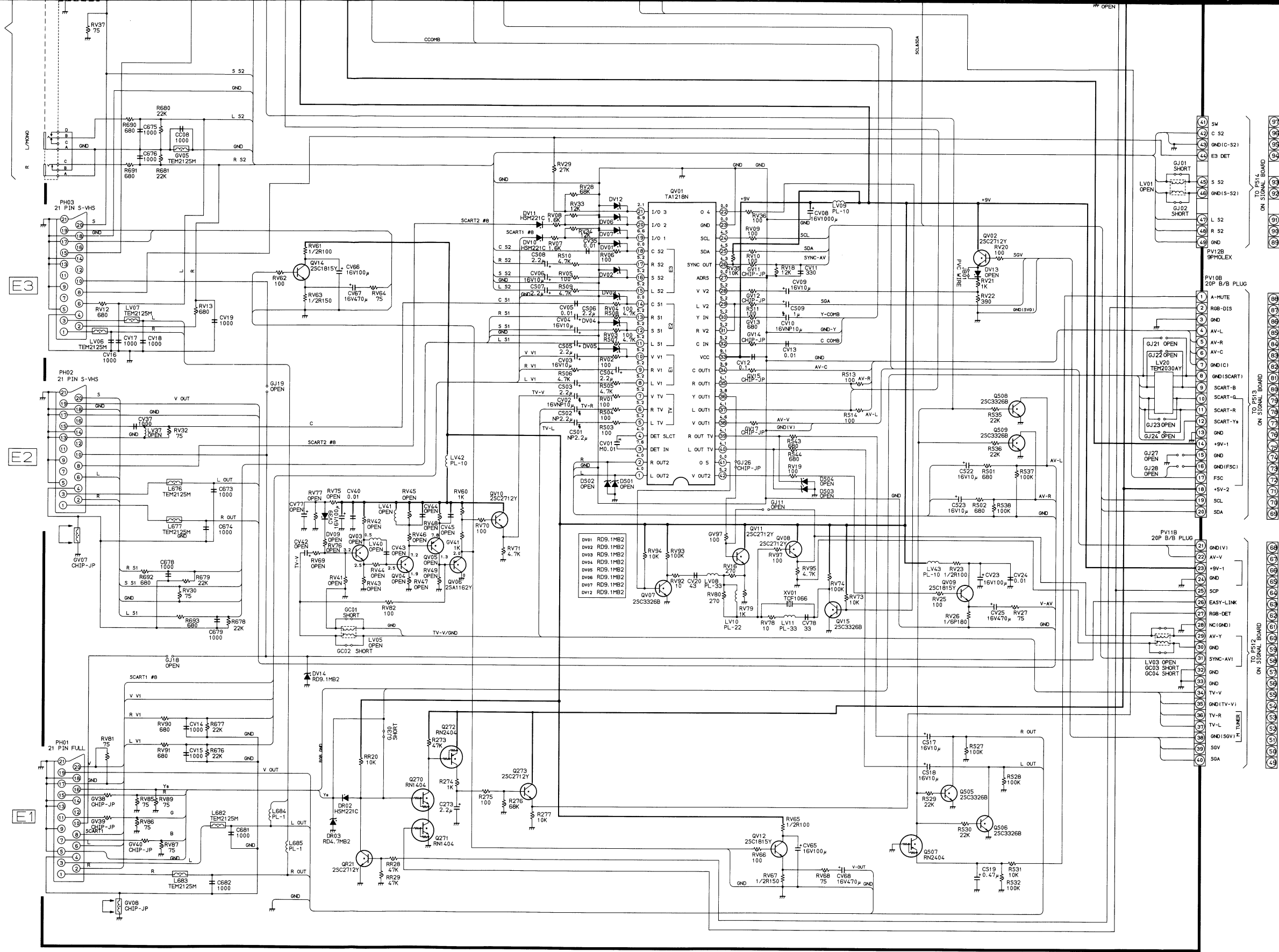
No. 1198
No. 1199

UNIT SN.		COPPER SIDE PARTS	
BACK-T	SN.23781835		SN.
CRT-D	SN.23782052		SN.
	SN.		SN.
	SN.		SN.

BACK-T/CRT-D
3398DG 9/9
PK3045

S-VIDEO

97-99-30



SCHEMATIC DIAGRAM

MODEL : 2998DG (3/9)

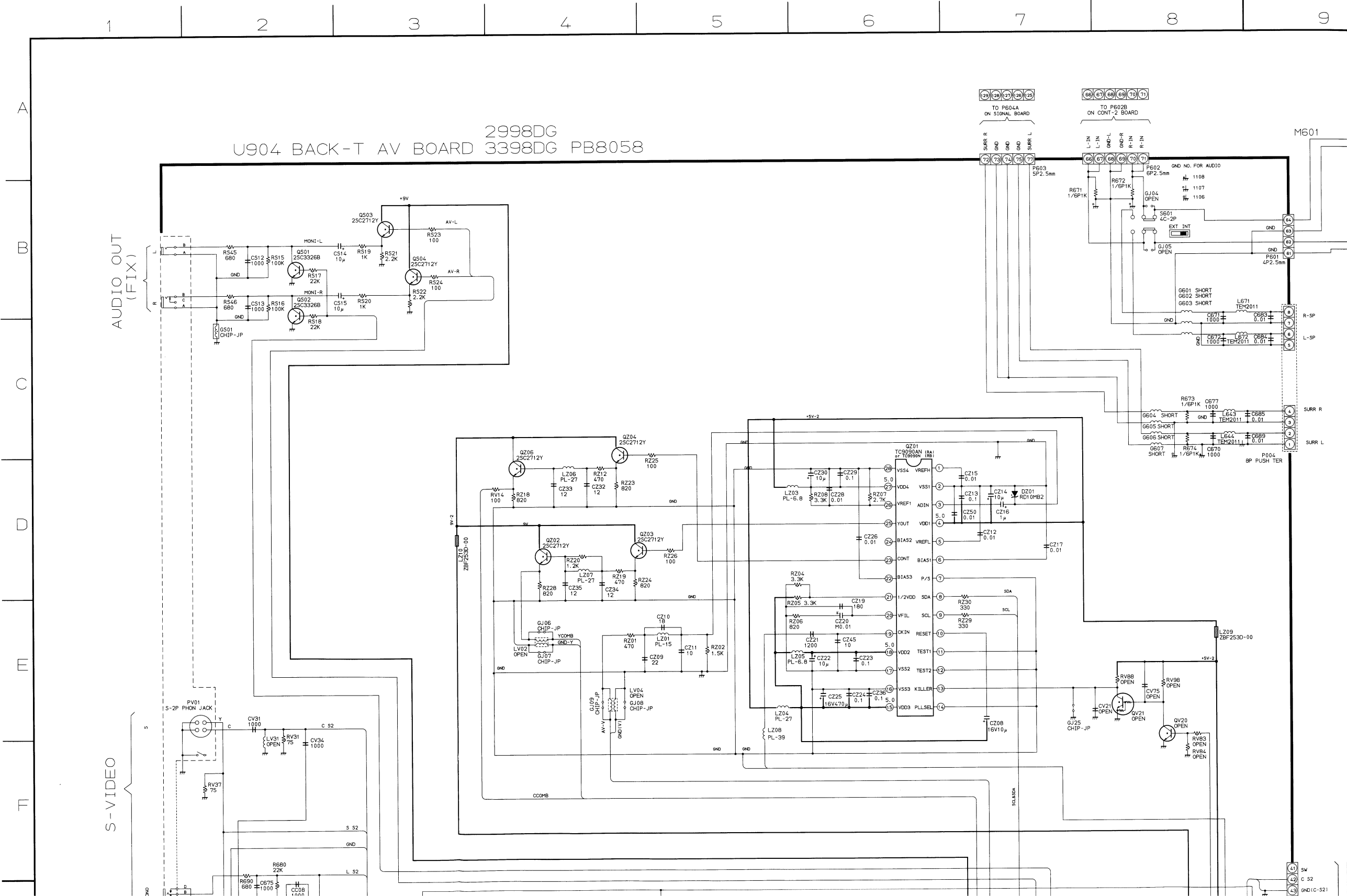
CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

- 1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
- 2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- 3. Waveforms are taken using a standard colour bar signal.
- 4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

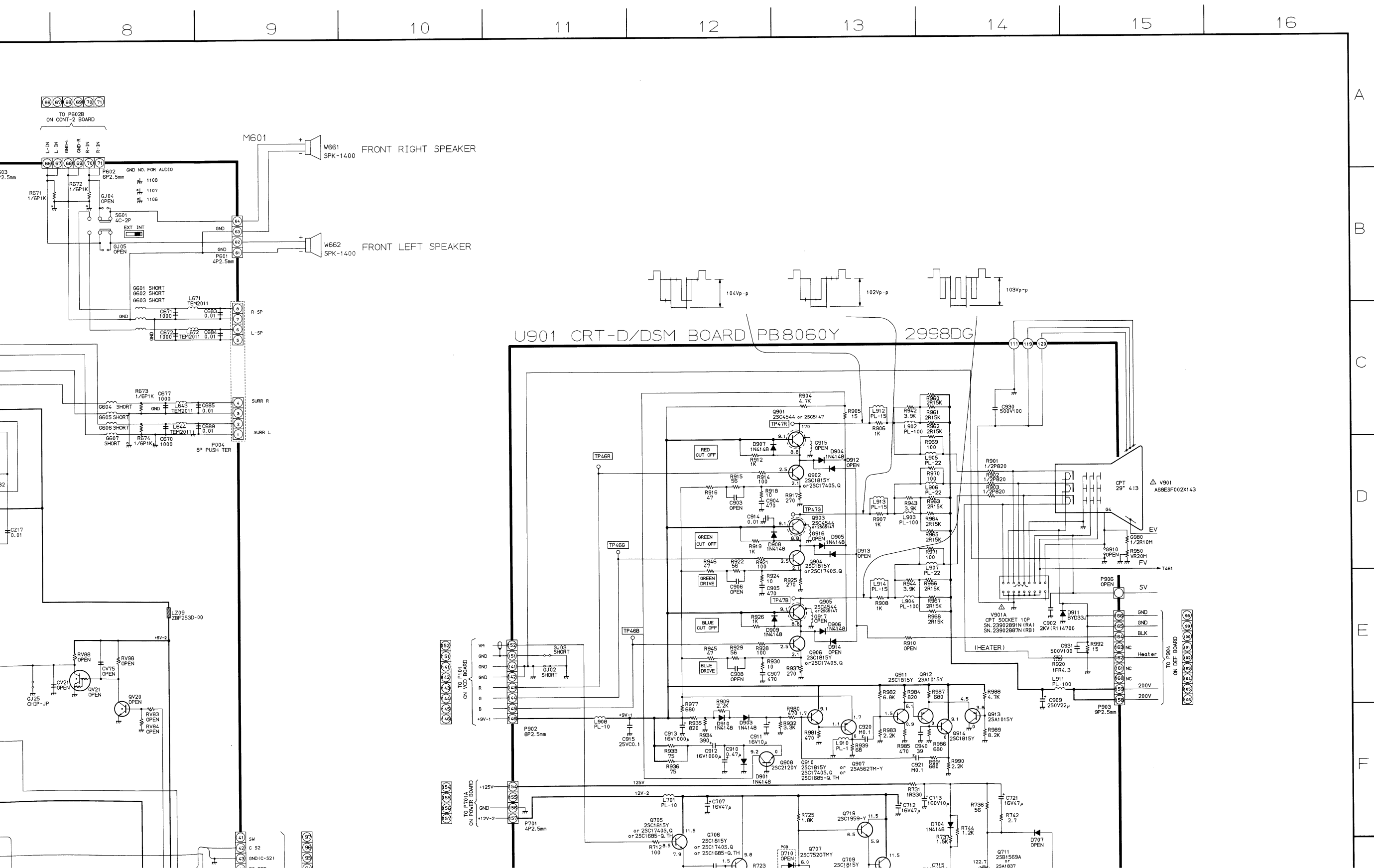
NOTES:

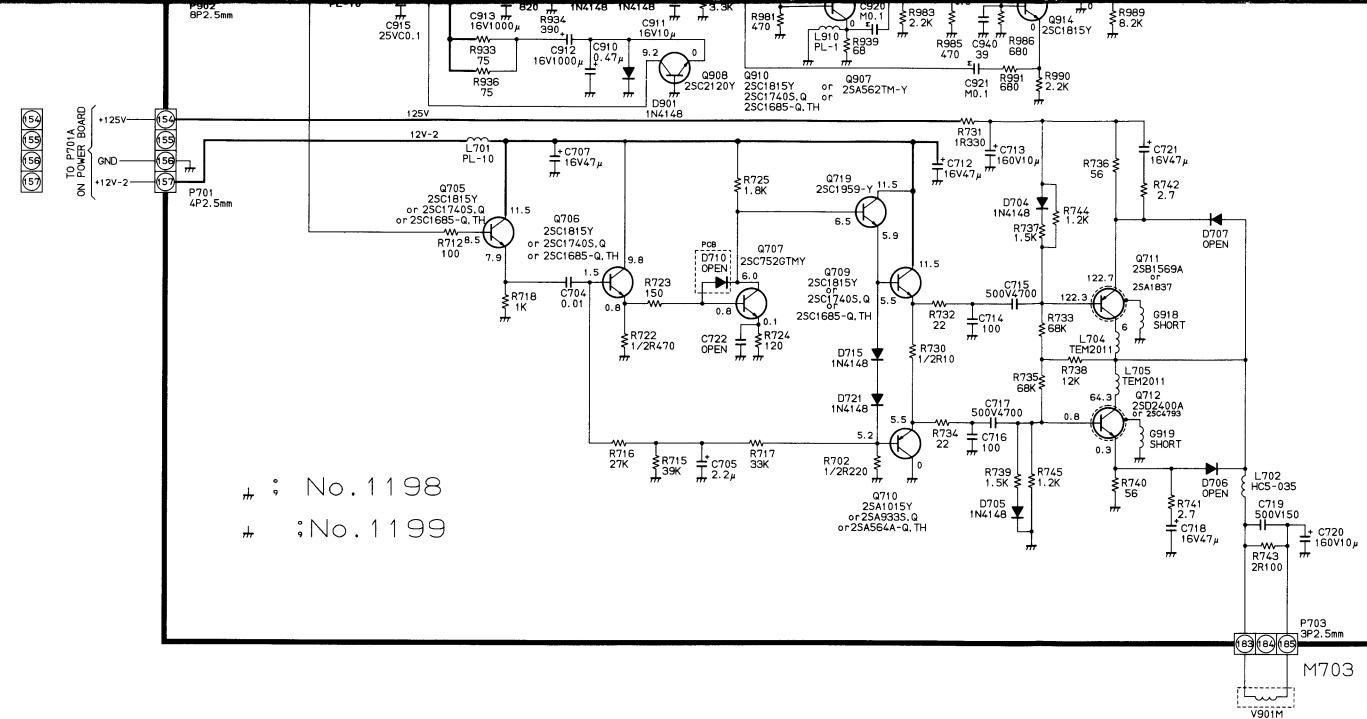
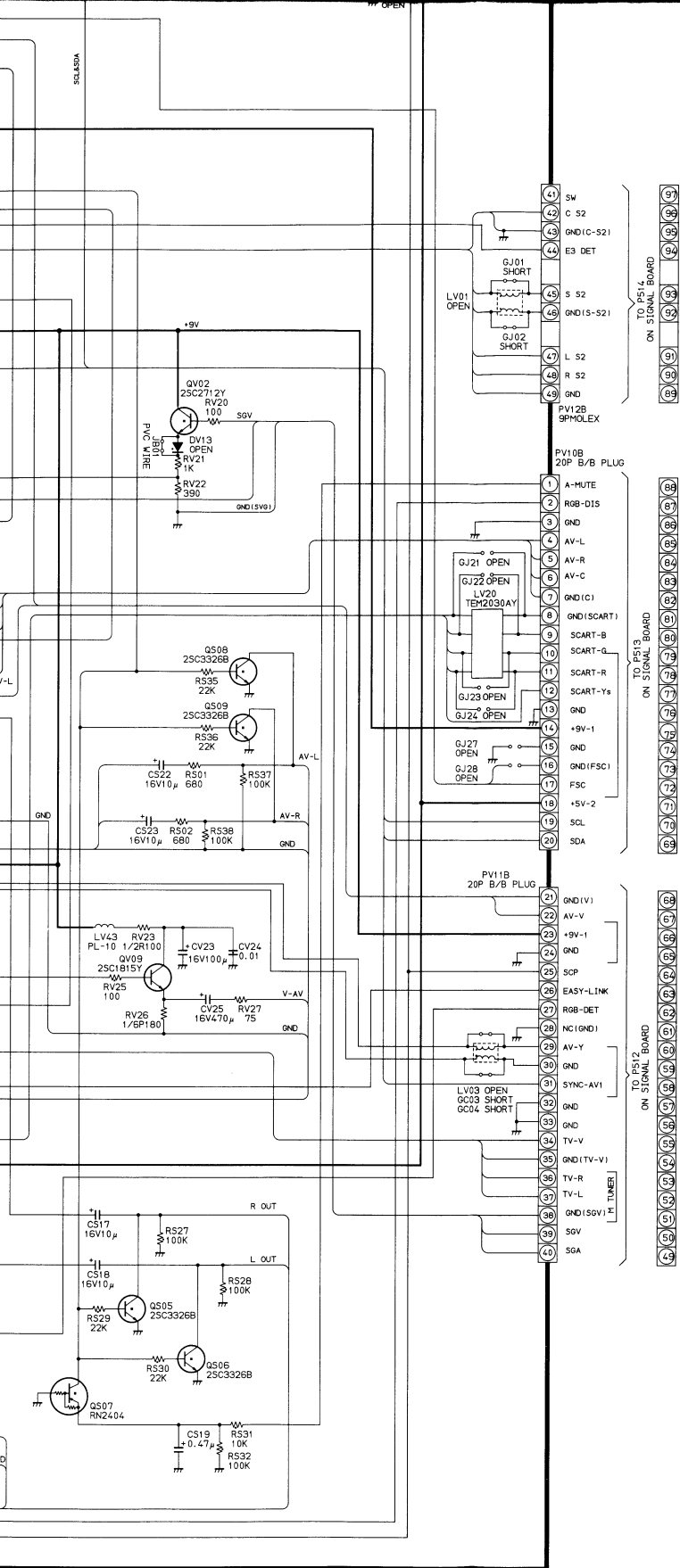
- 1. D.C. resistance value of a principal trigram. These are measured for separate
- 2. The circuits are subject to change with
- 3. ● : Solder links.



1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. : Solder links.

1. Resistance is shown in ohm, $k=1,000$, $M=1,000,000$
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.





SCHEMATIC DIAGRAM

MODEL : 2998DG (5/9)
3398DG

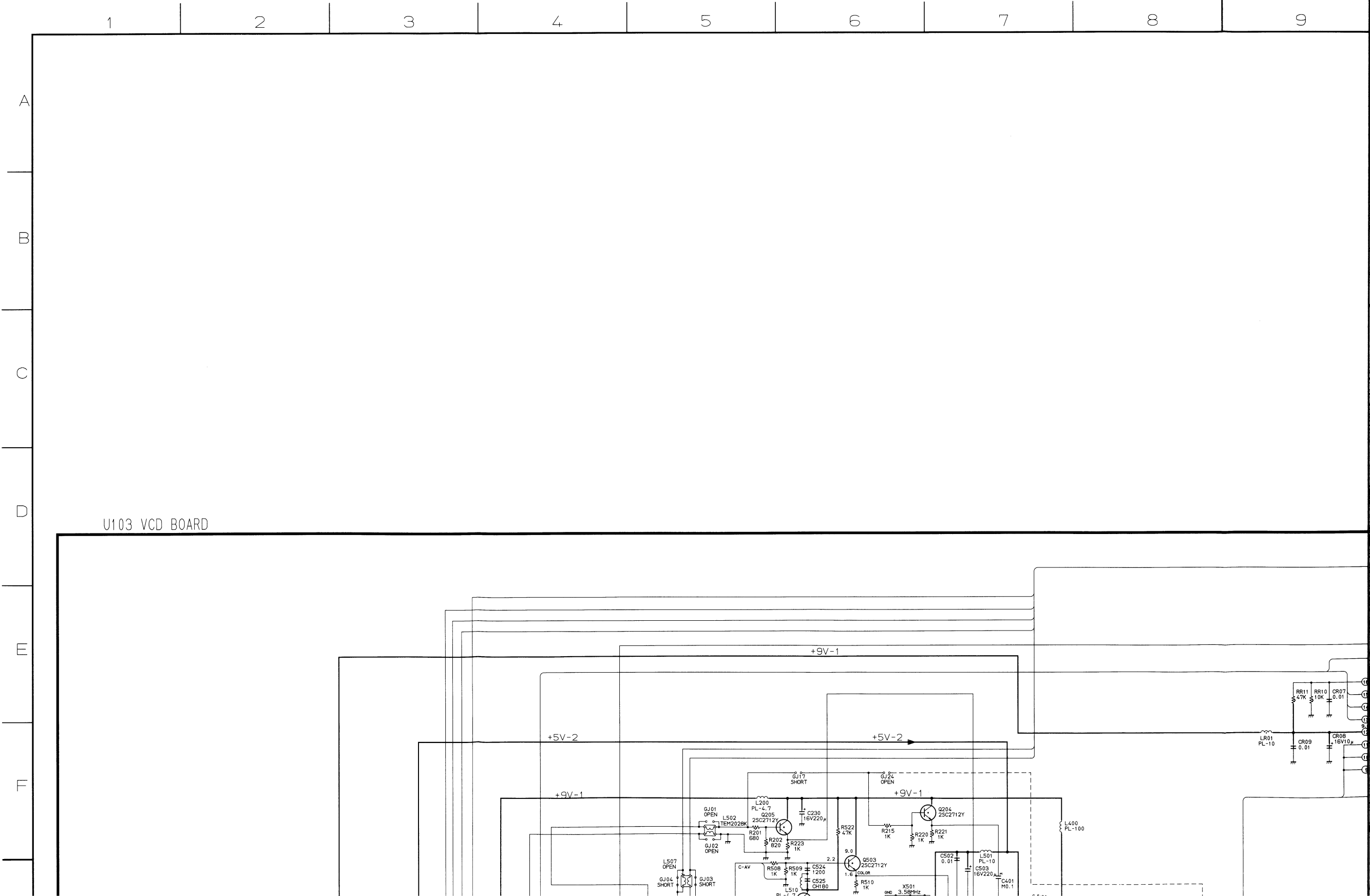
CAUTION: The international hazard symbols “” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

- 1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
- 2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- 3. Waveforms are taken using a standard colour bar signal.
- 4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

- 1. D.C. resistance value of a principal transform gram. These are measured for separated from
- 2. The circuits are subject to change without not
- 3.  : Solder links.



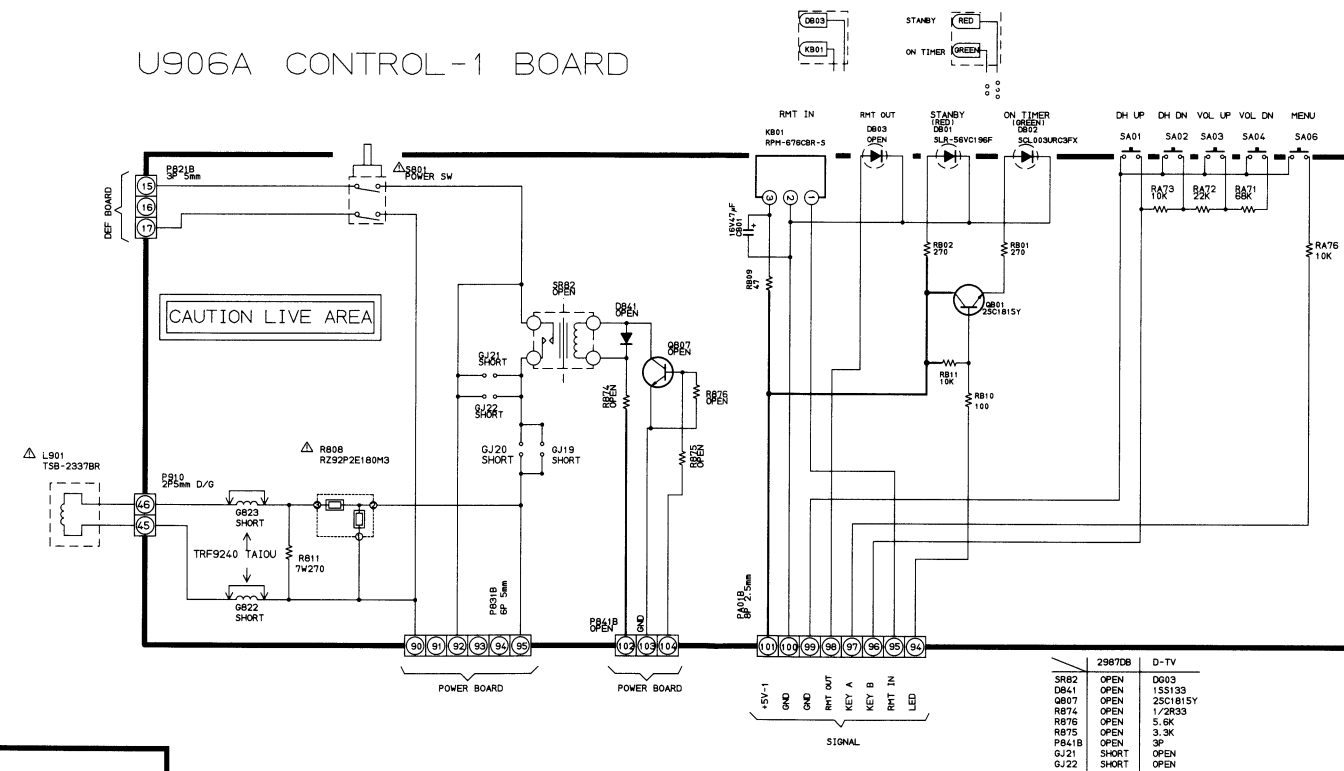
NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. $\bullet$: Solder links.

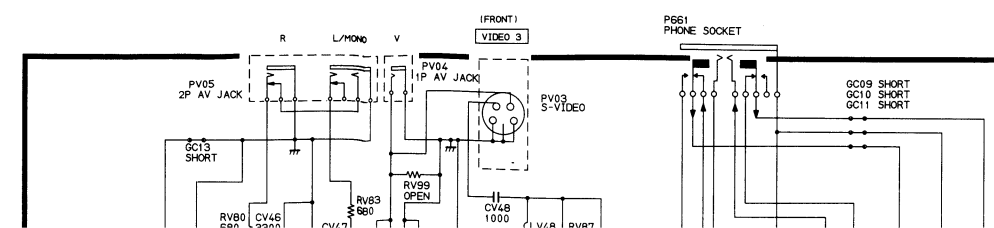
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

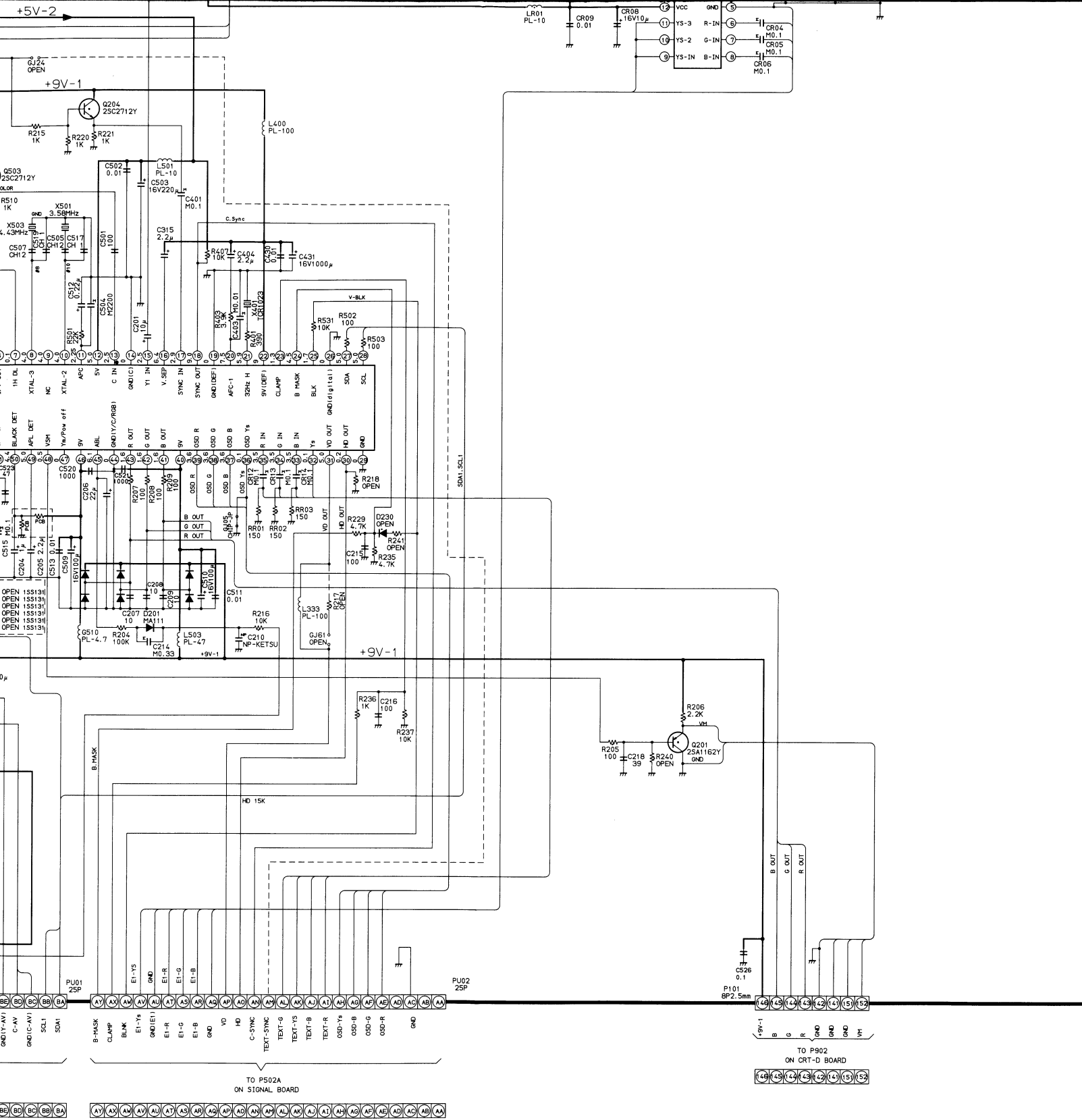
1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μ F and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μ H, and the values less than 1 in H.

U906A CONTROL-1 BOARD

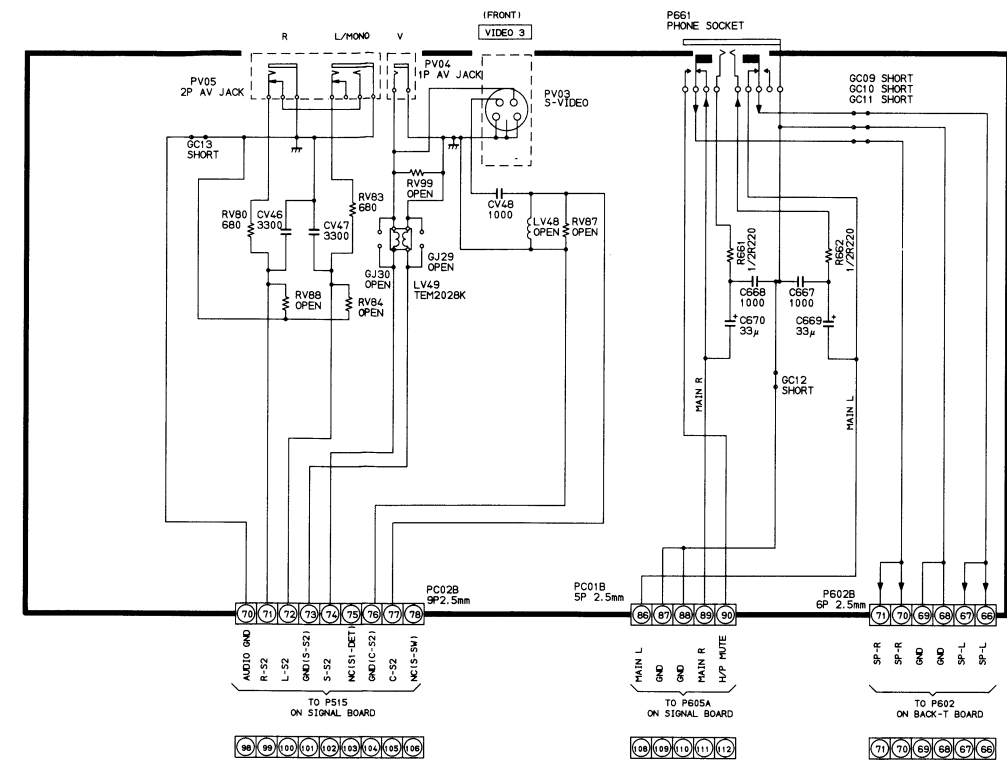


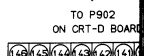
U909B CONT-2 BOARD





U909B CONT-2 BOARD





TO P902
ON CRT-D BOARD

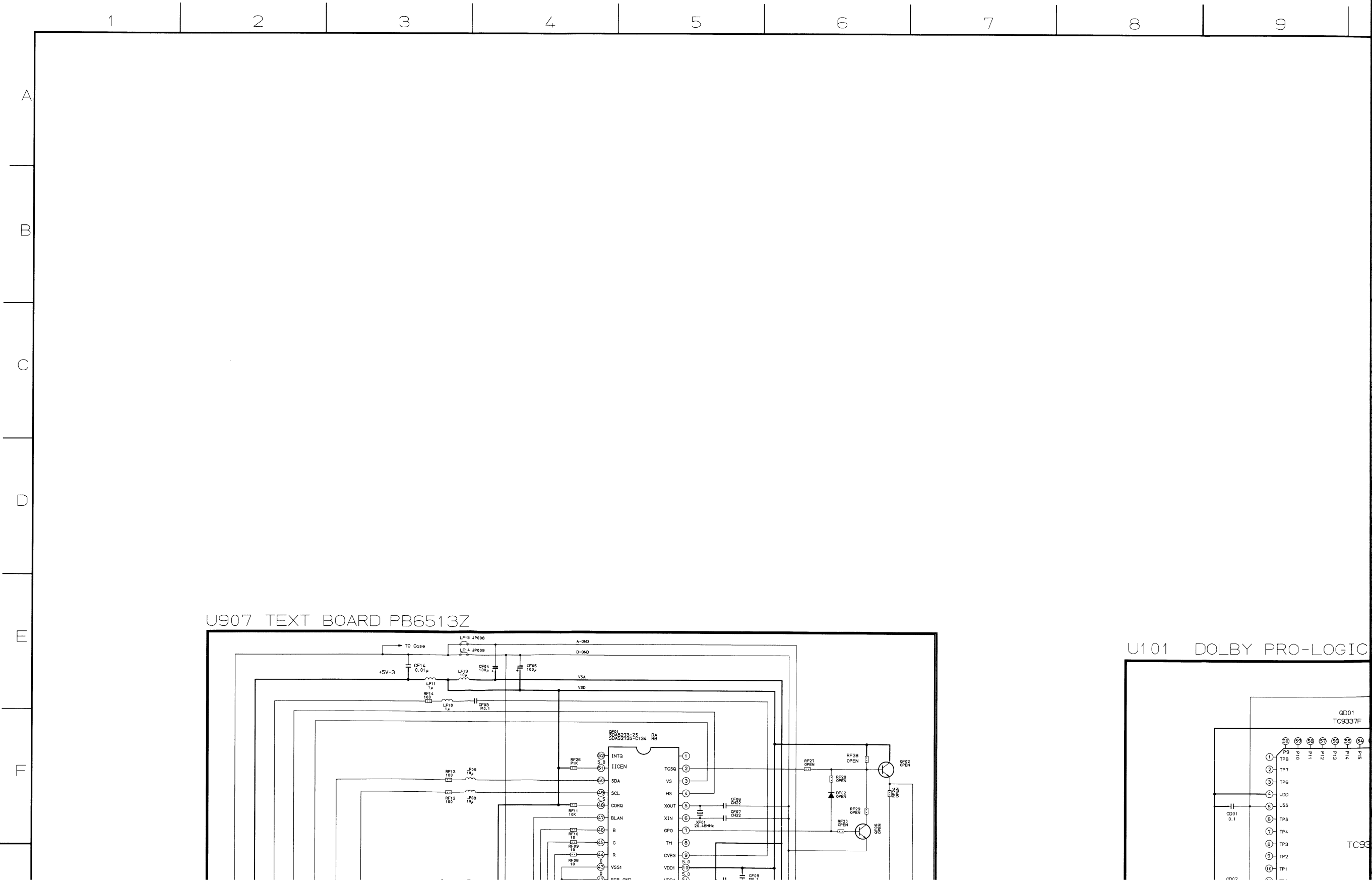
CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transformer is given in the parts list. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3.  : Solder links.



NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3.  : Solder links.

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.

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A

B

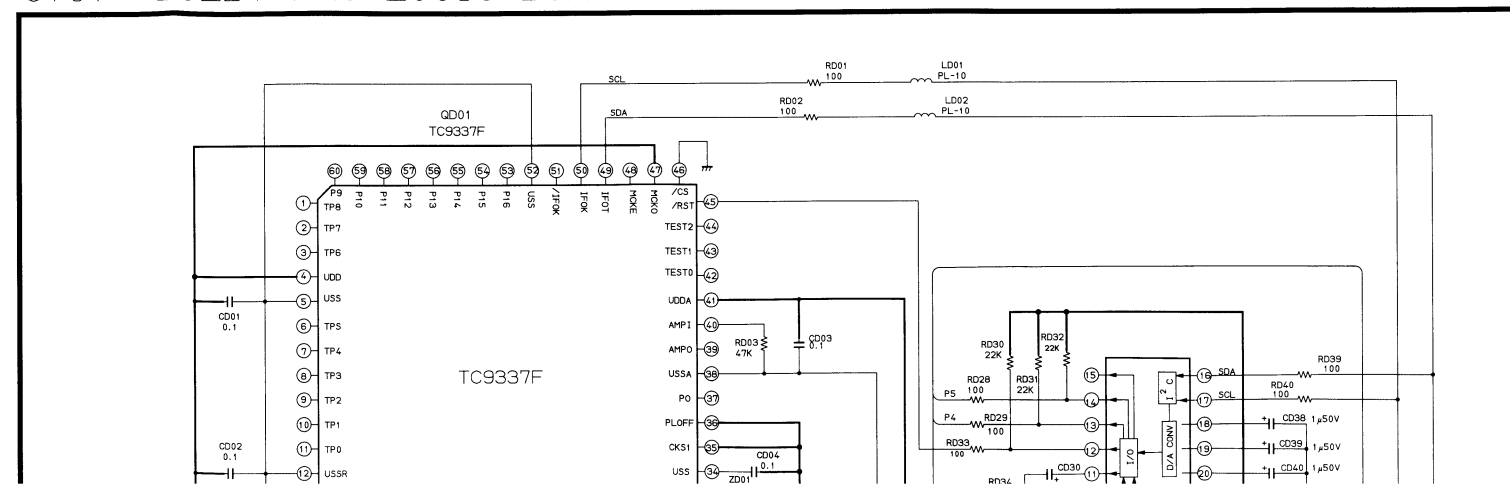
C

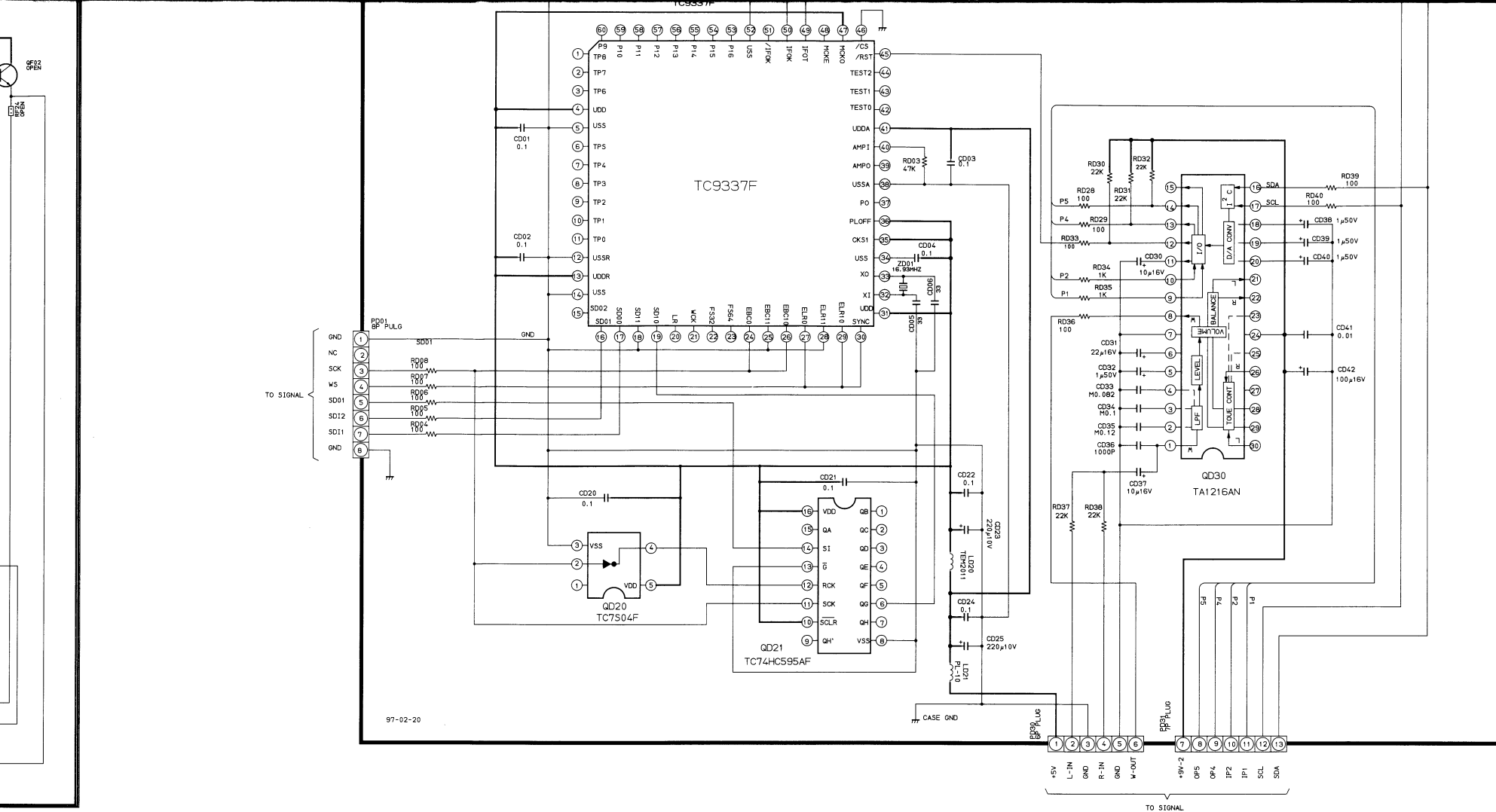
D

E

F

U101 DOLBY PRO-LOGIC BOARD PB7205X



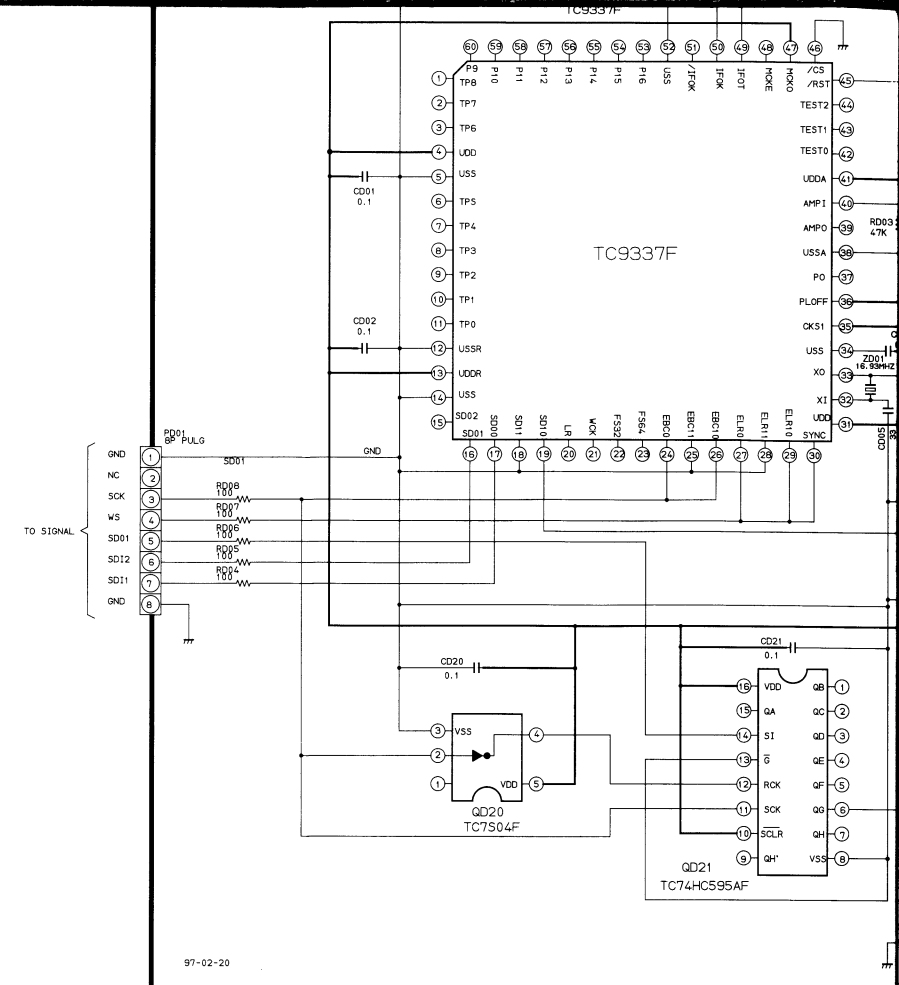
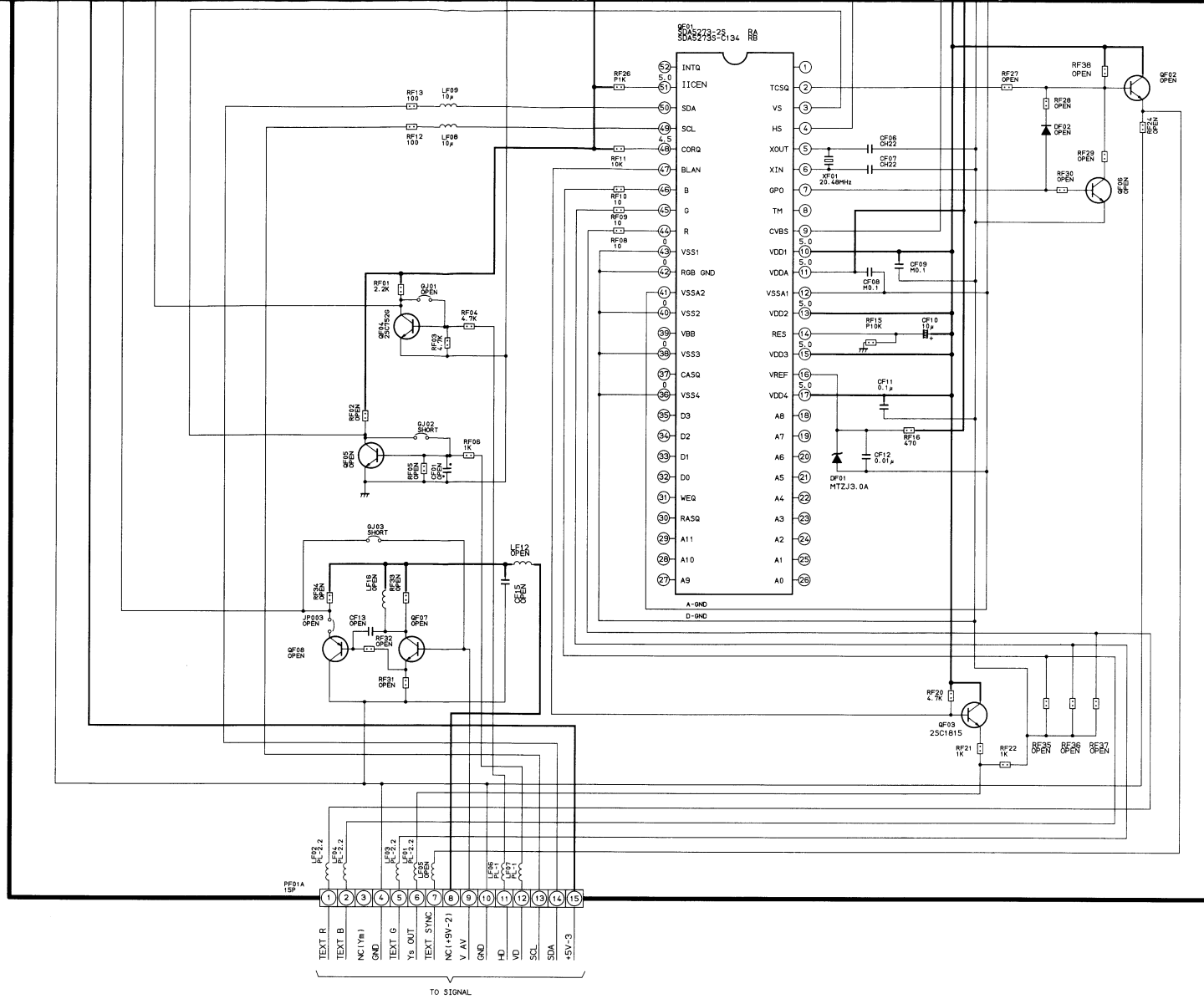


UNIT SN.		COPPER SIDE PARTS	
TEXT	SN. 23781768		SN.
DOL-PRO	SN. 23706499		SN.
	SN.		SN.
	SN.		SN.

TEXT/DOLBY PRO-LOGIC
2998DG
3398DG 4/9
PK3040

F
G
H
I
J
K
L

7 8 9 10 11 12 13 14 15 16



SCHEMATIC DIAGRAM

MODEL : 2998DG (2/9)

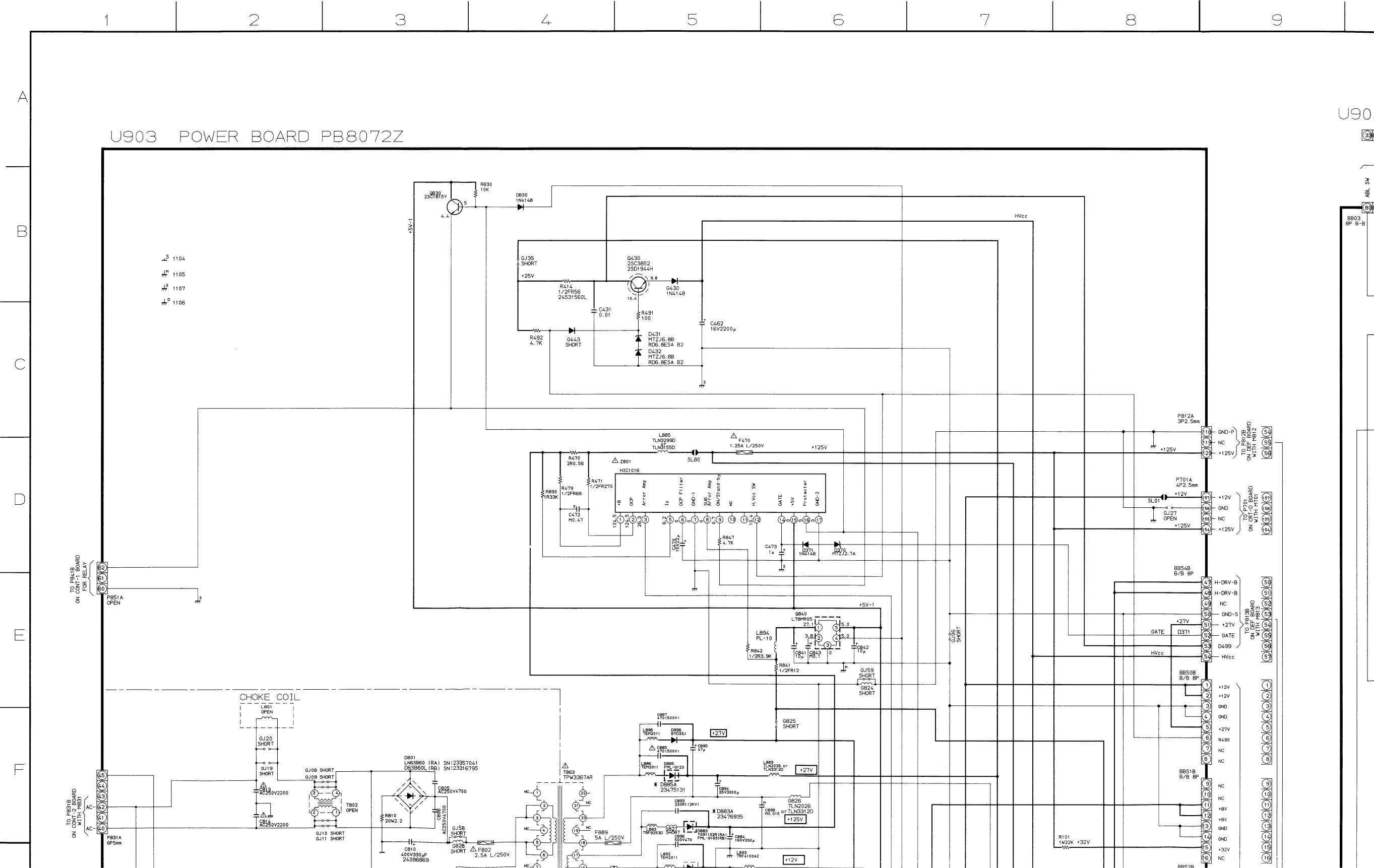
CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

- 1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
- 2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- 3. Waveforms are taken using a standard colour bar signal.
- 4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

- 1. D.C. resistance value of a principal transformer is 1 gram. These are measured for separated from the circuit.
- 2. The circuits are subject to change without notice.
- 3. $\bullet$: Solder links.



220
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NOTES:

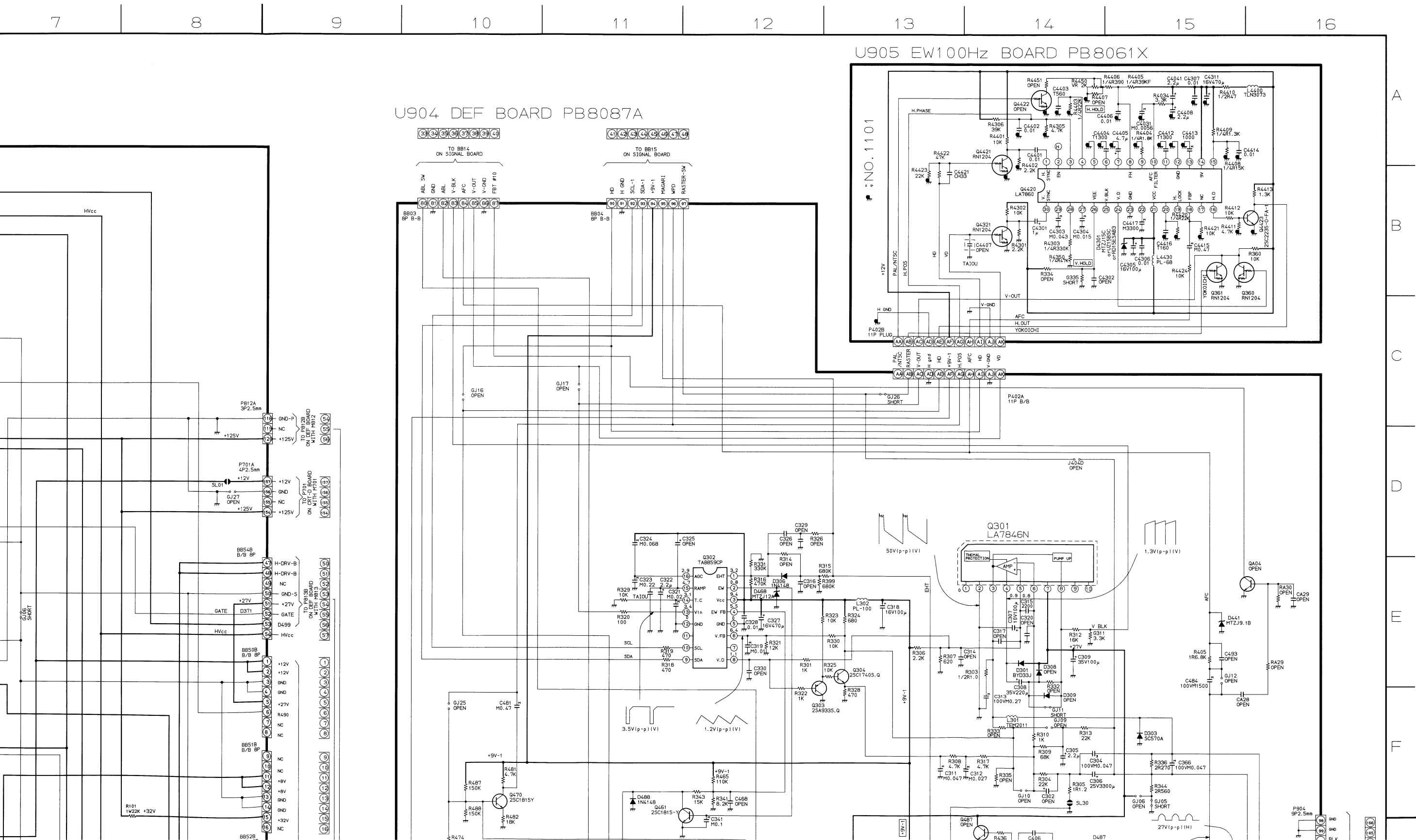
1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3.  : Solder links.

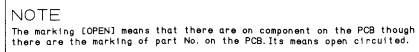
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.

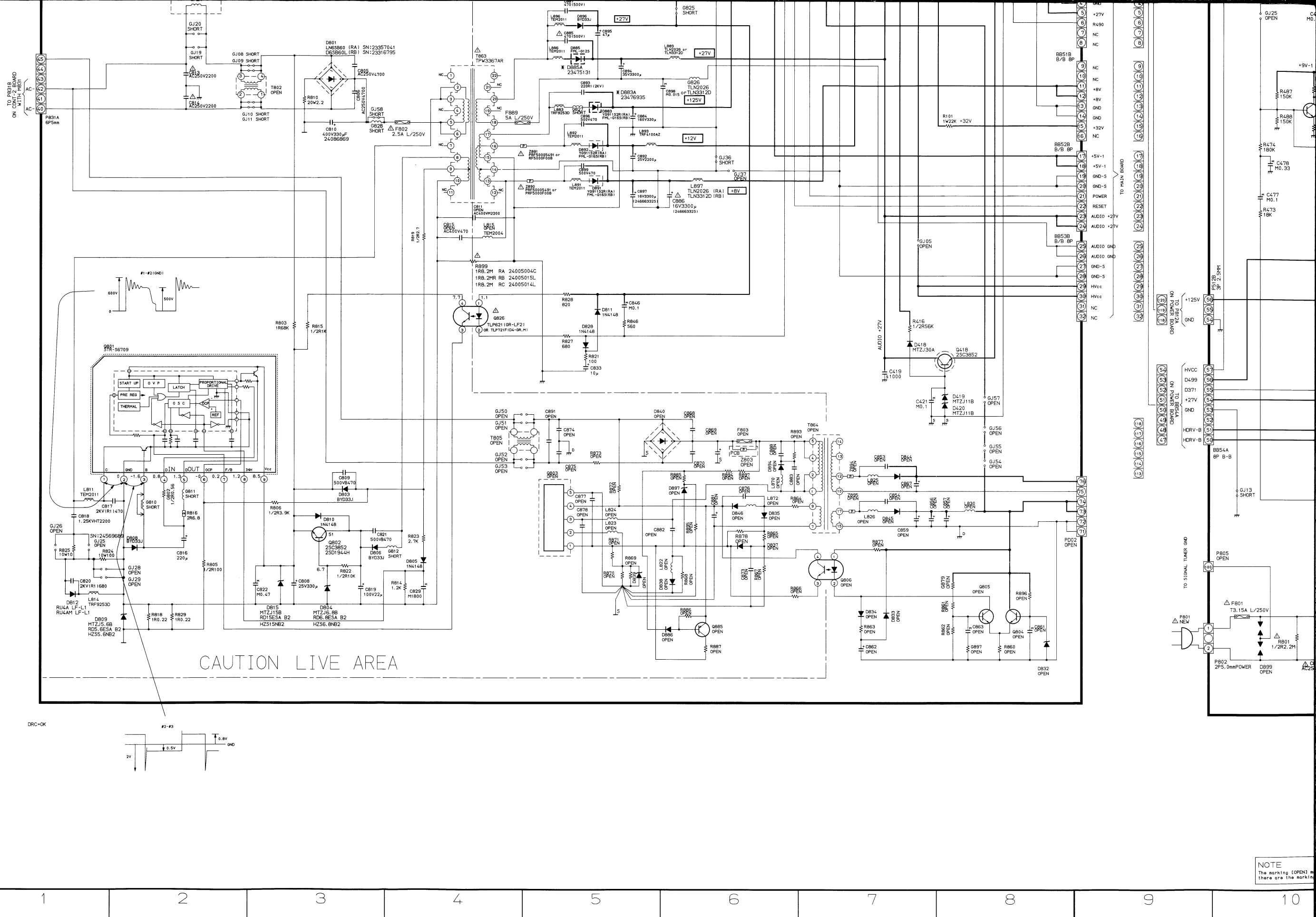
U904 DEF BOARD PB8087A

U905 EW100Hz BOARD PB8061X





POWER/DEF/EW100Hz
2998DG 2/9
PK3038



CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

- OBSERVATION OF VOLTAGES AND WAVEFORMS
1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.

2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.

3. Waveforms are taken using a standard colour bar signal.

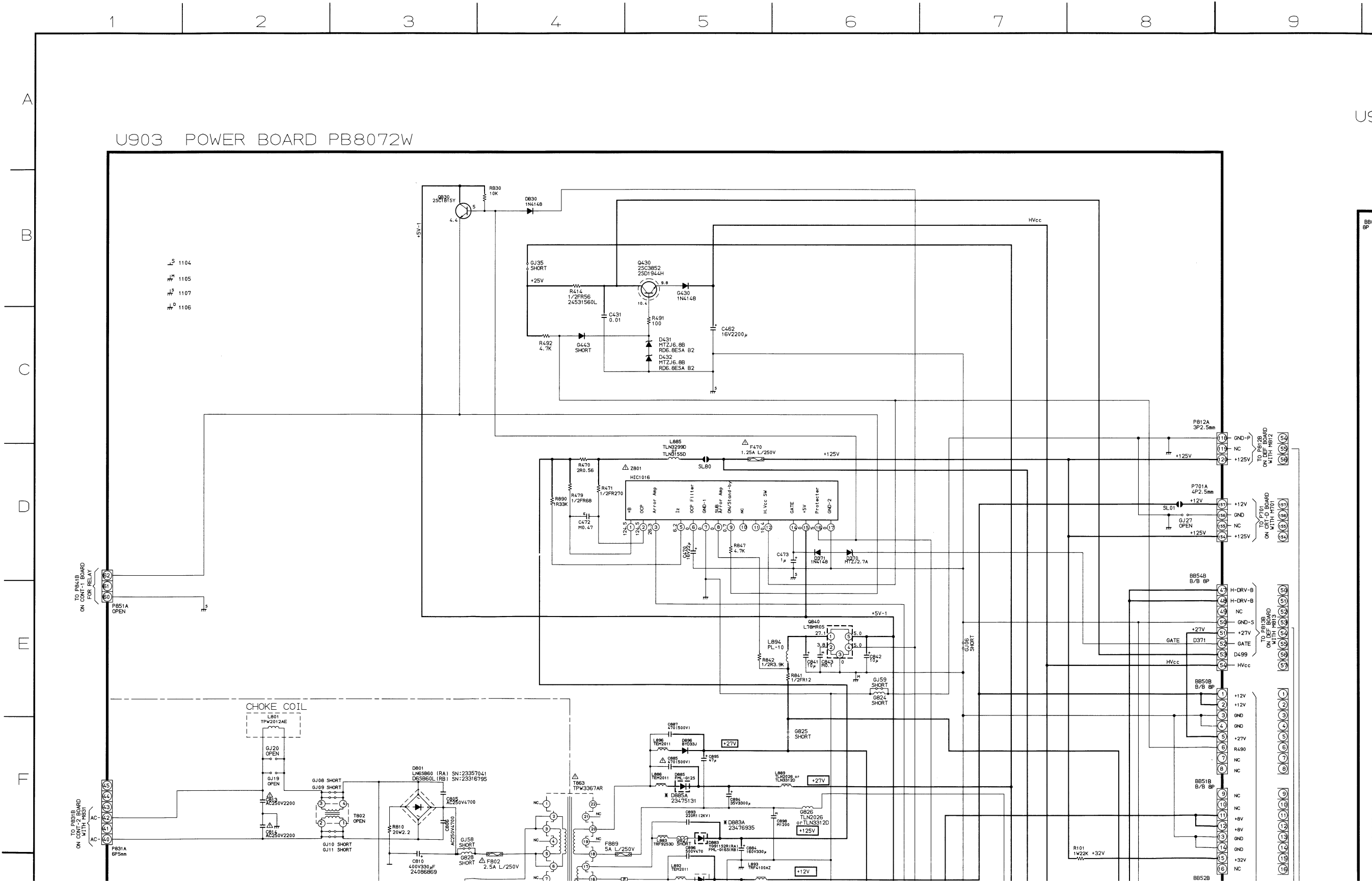
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

- NOTES:
1. D.C. resistance value of a principal transformer

gram. These are measured for separated from the

2. The circuits are subject to change without notice

3.  : Solder links.

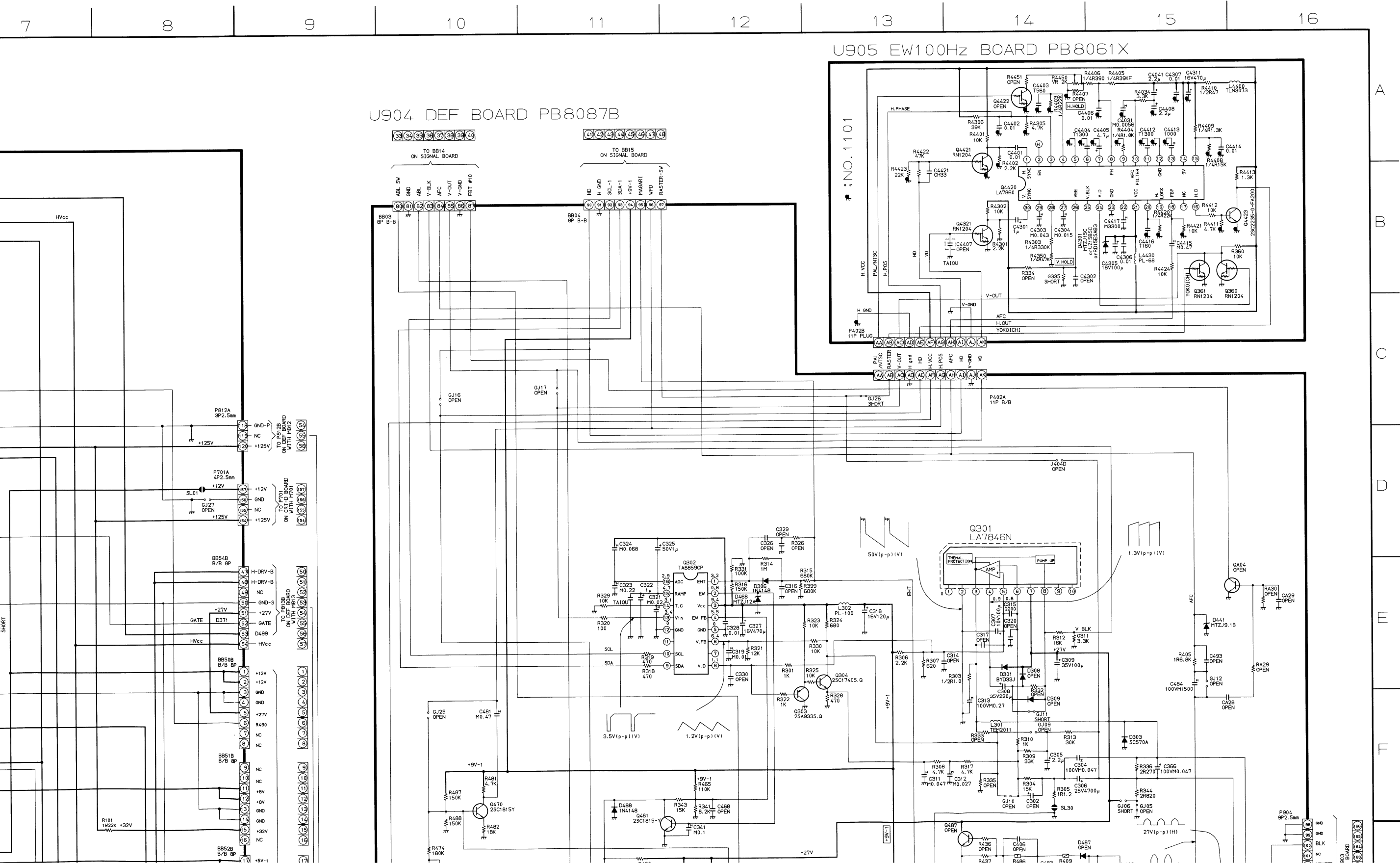


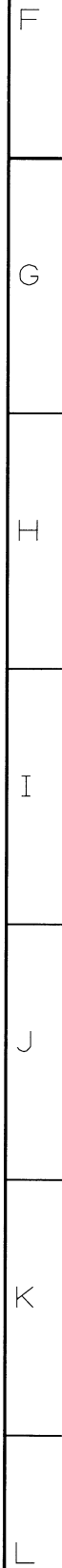
NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ● : Solder links.

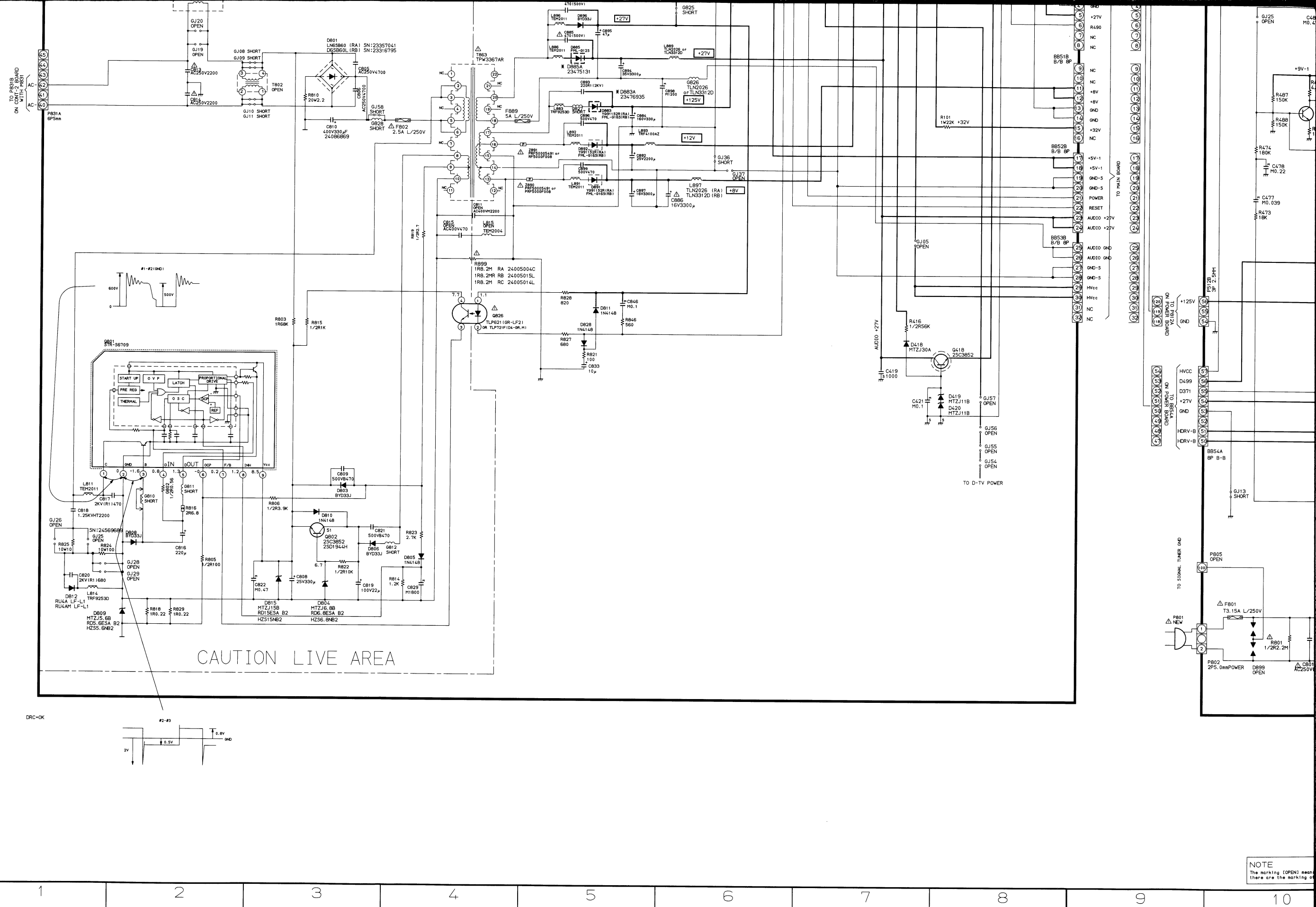
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.





POWER/DEF/EW100Hz
3398DG 8/9
PK3044



SCHEMATIC DIAGRAM

MODEL : 3398DG (7/9)

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- OBSERVATION OF VOLTAGES AND WAVEFORMS
1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.

2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.

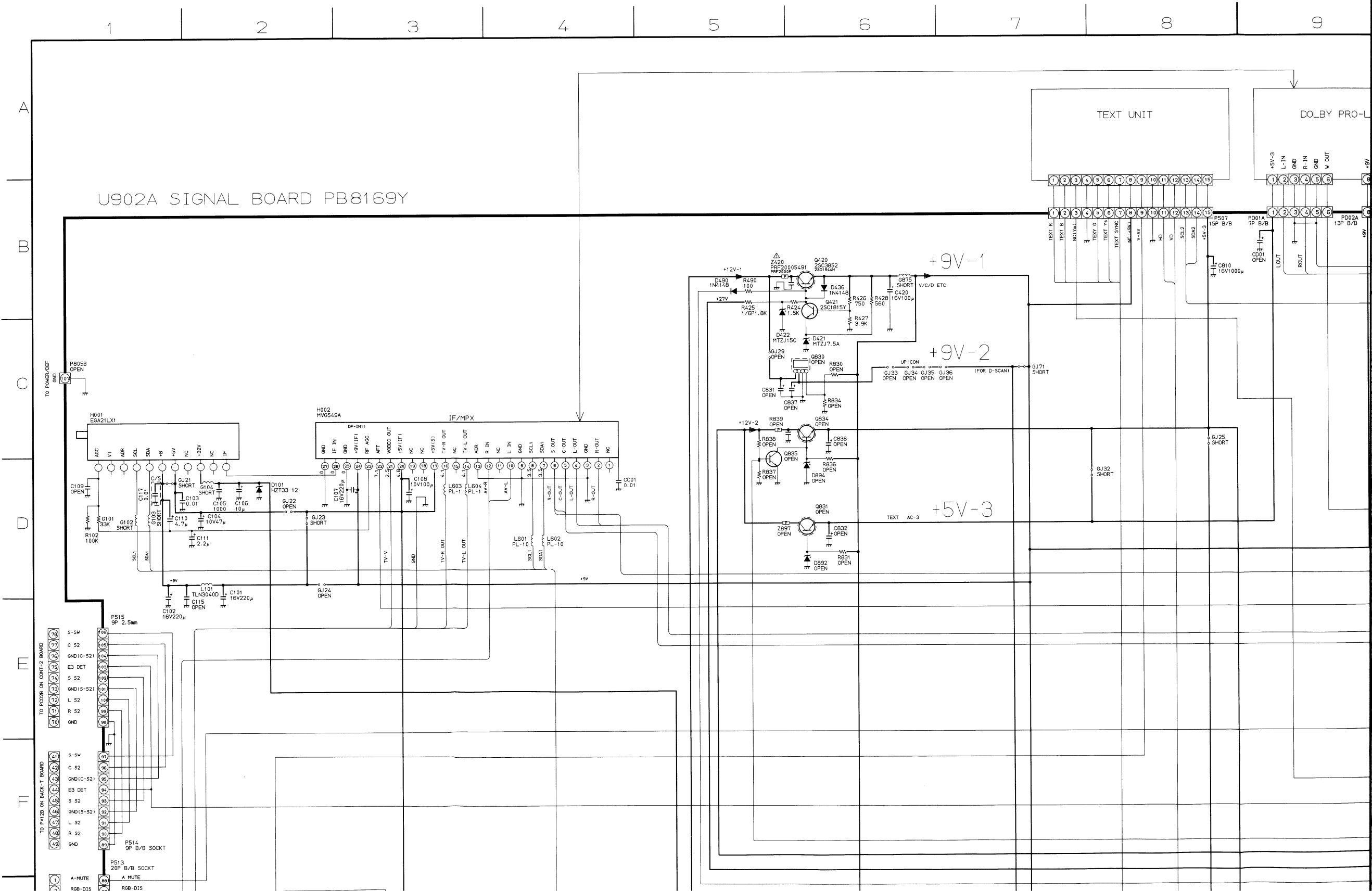
3. Waveforms are taken using a standard colour bar signal.

4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

- NOTES:
1. D.C. resistance value of a principal transformer. These are measured for separated from

2. The circuits are subject to change without n

3.  : Solder links.

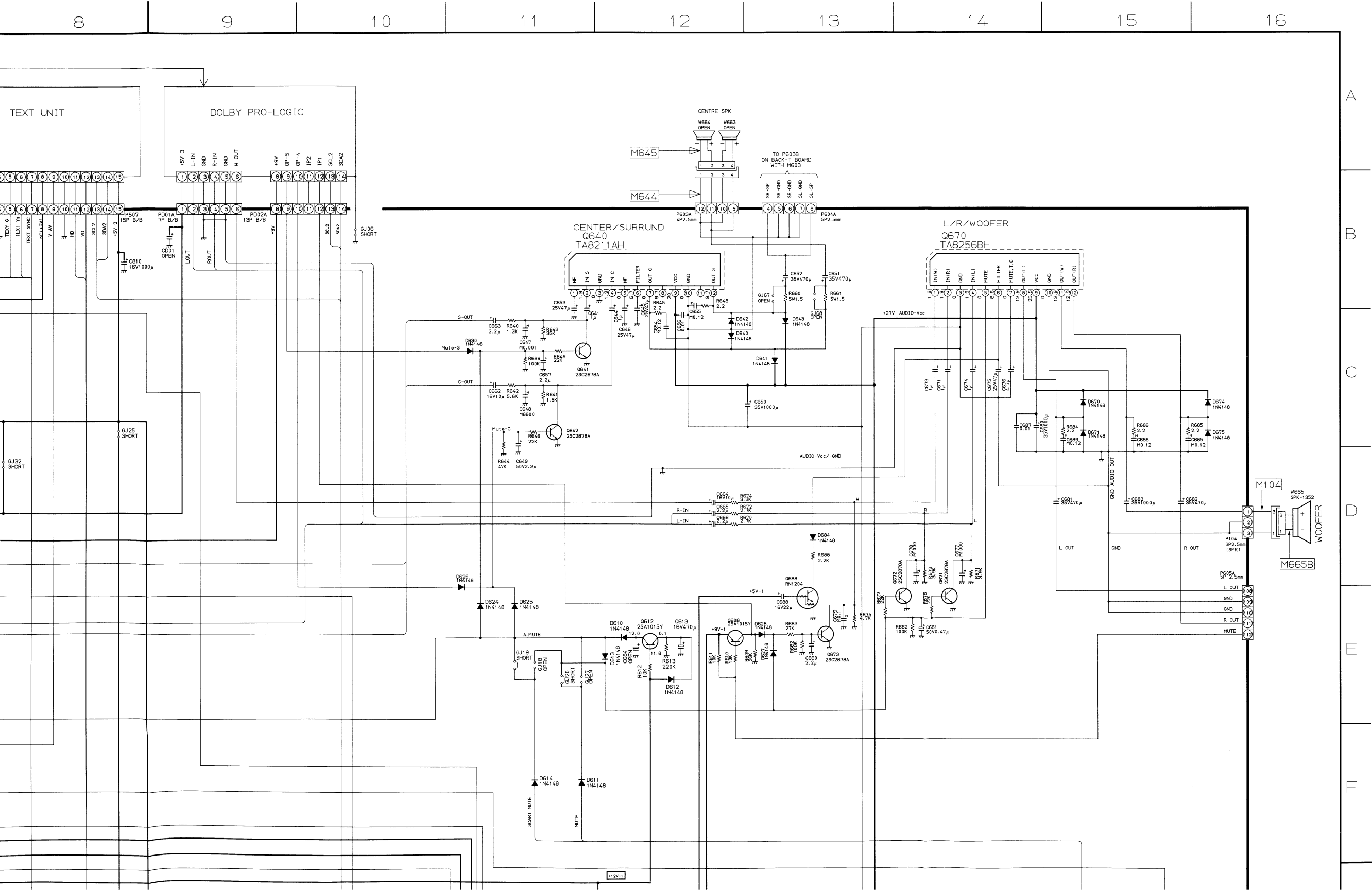


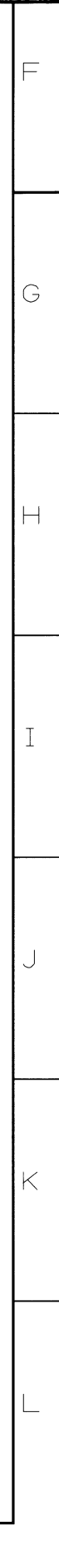
NOTES:

- 1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
- 2. The circuits are subject to change without notice.
- 3. ● : Solder links.

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

- 1. Resistance is shown in ohm, k=1,000, M=1,000,000
- 2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μ F and the values more than 1 in pF.
- 3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μ H, and the values less than 1 in H.





SIGNAL
3398DG 7/9
PK3043



SCHEMATIC DIAGRAM

MODEL : 2998DG (1/9)

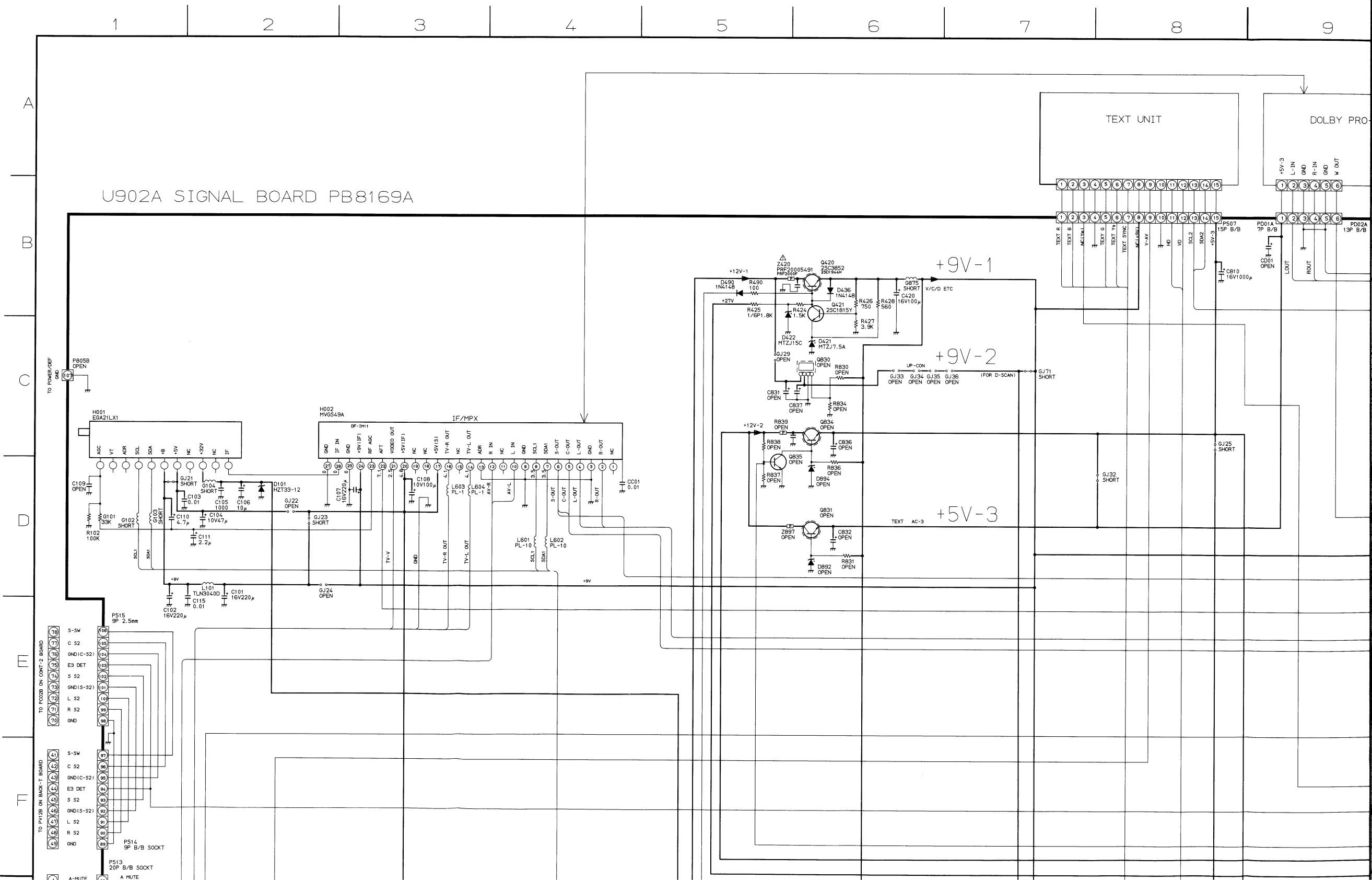
CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

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- 1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
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- 3. Waveforms are taken using a standard colour bar signal.
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NOTES:

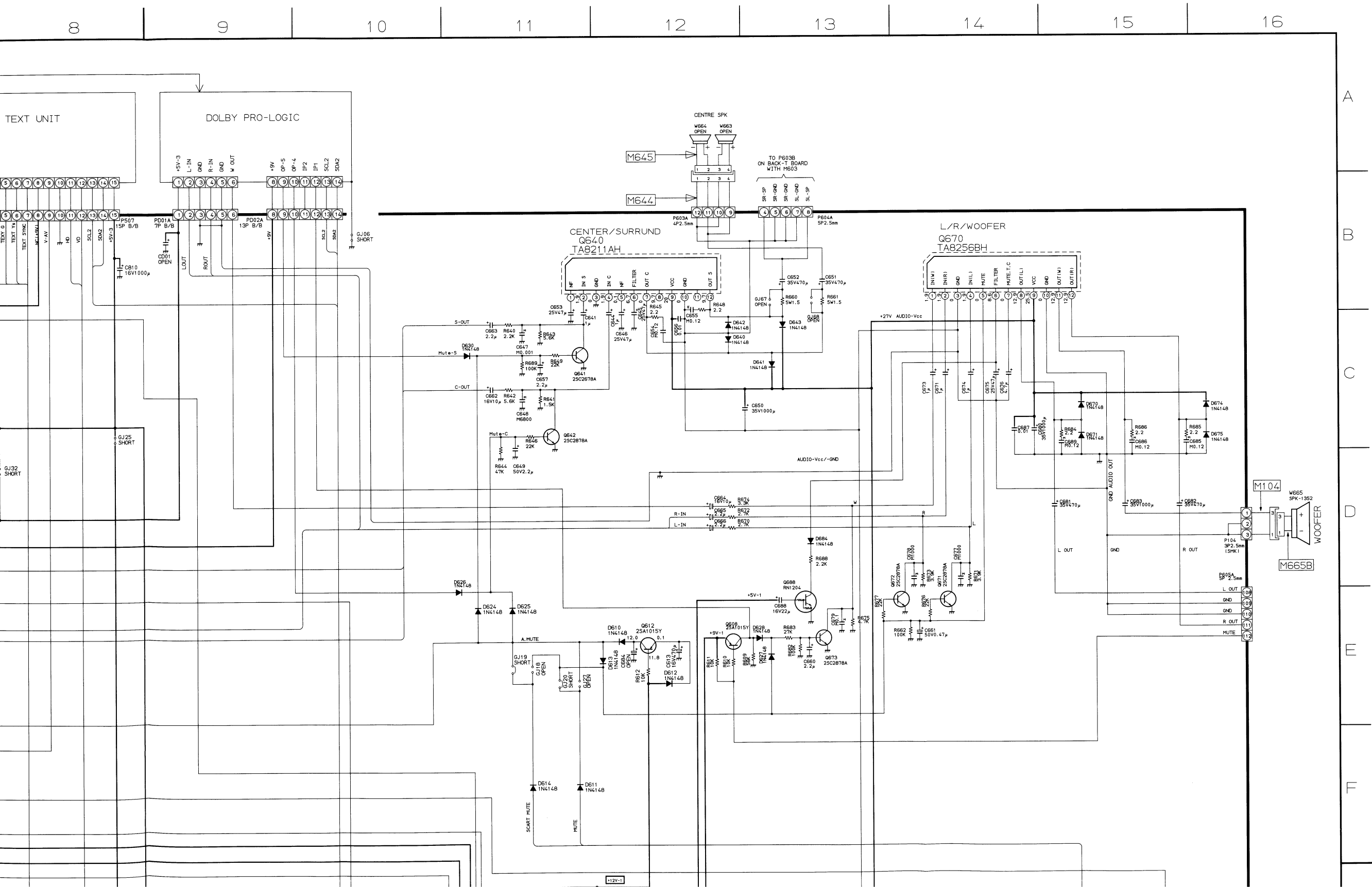
- 1. D.C. resistance value of a principal trans-gram. These are measured for separated f
- 2. The circuits are subject to change without
- 3. ● : Solder links.

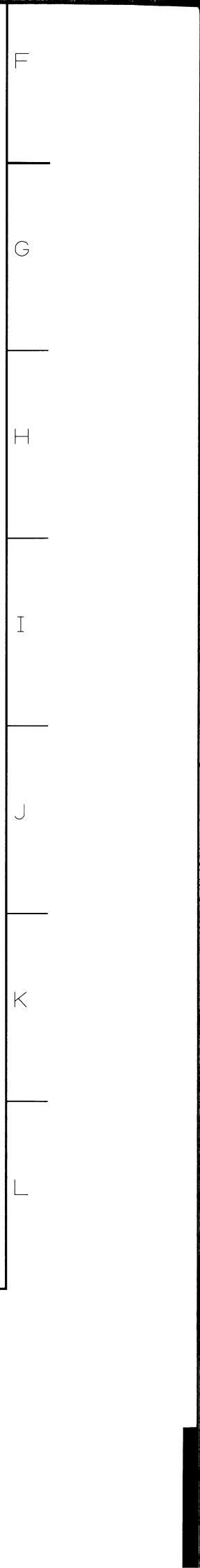


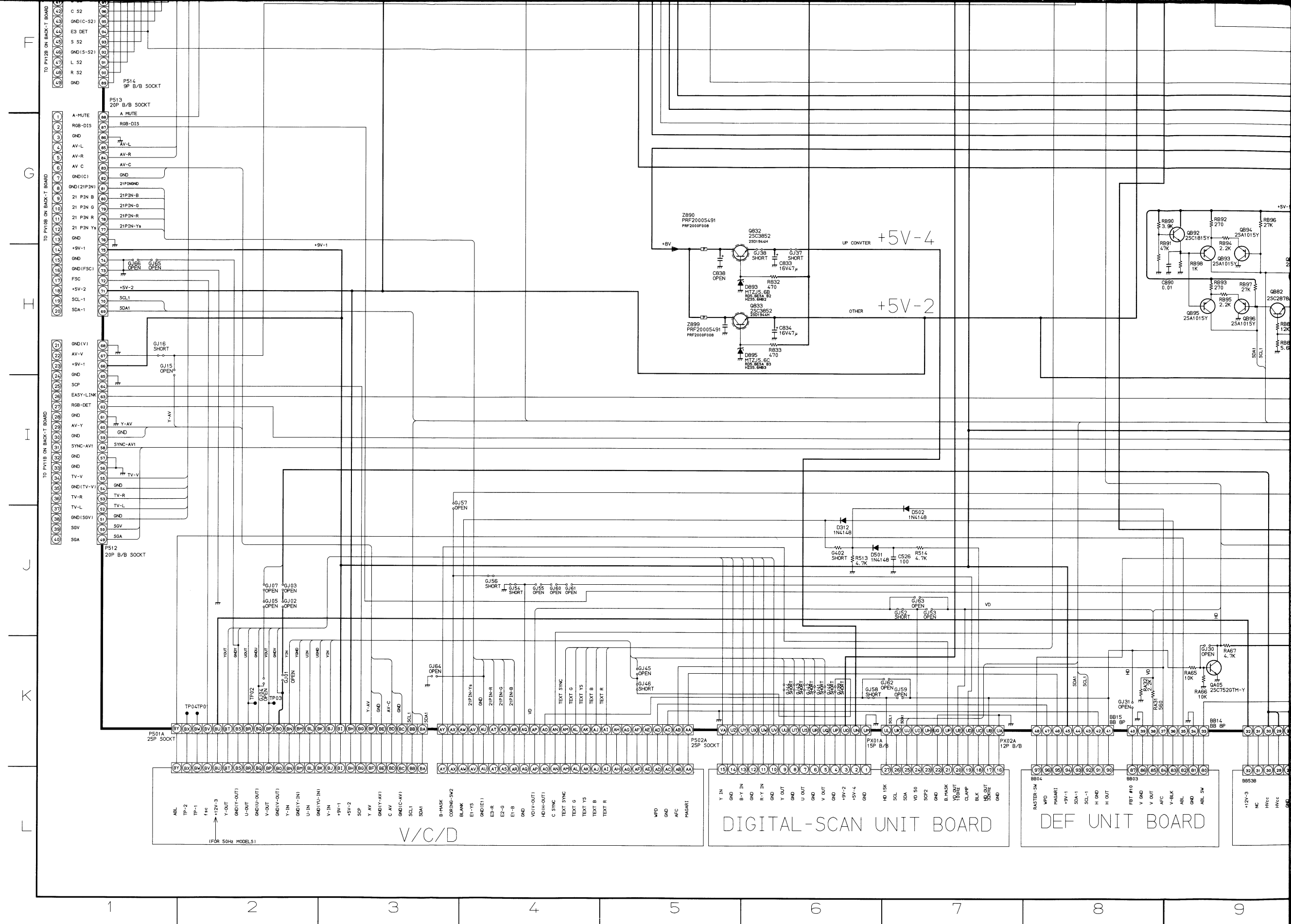
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

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2. The circuits are subject to change without notice.
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2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH , and the values less than 1 in H.







SPECIFICATIONS (Representative: 2998DG)

Input Power Rating:	AC 220 ~ 240 Volts, 50 Hz					
Aerial Input Impedance:	75 ohm unbalanced type for VHF, UHF and CATV					
Receiving Channels:	System	Channel	VHF	UHF	CATV	
	PAL B/G	CCIR	2 ~ 12	21 ~ 69	S1 ~ S41	X ~ Z + 2,
	SECAM B/G	CCIR	2 ~ 12	21 ~ 69	S1 ~ S41	X ~ Z + 2,
	PAL D/K	CHINA	1 ~ 12	13 ~ 57	Z-1 ~ Z-35	
	SECAM D/K	OIRT	1 ~ 12	21 ~ 69	X-1 ~ X-19	
	PAL I	UK	—	21 ~ 69	—	
	SECAM L	FRANCE	FB ~ F6	21 ~ 69	S1 ~ S41	X ~ Z +2,
	/CCIR					
	PAL, SECAM 50 Hz/60 Hz (For Video Disk play back)					
	4.43 NTSC (For VCR playback), 3.58 NTSC (For VCR playback)					
Intermediate Frequencies:	Picture I-F carrier frequency		38.9 MHz (OTHERS) 33.95 MHz (L, VL)			
	Sound I-F carrier frequency					
	L System		32.4 MHz (L, VH, U)/40.45 MHz (L, VL)			
	B/G System		33.4 MHz			
	D/K System		32.4 MHz			
	I System		32.9 MHz			
Picture Tube:	29 inches, 680 mm (measured on diagonal of viewable picture area)					
	110° deflection					
Sound Output:	10 W + 10W (at 10% Distortion, Main), 10W (at 10% Distortion, center)					
	13W (at 10% Distortion, Woofer), 10 W + 10W (at 10% Distortion, Surround)					
Speakers:	60 mm x 120 mm oval, 2 pcs (Main)					
	100 mm, round, 1 pc (Woofer)					
	60 mm x 120 mm oval, 2 pcs (Center)					
Cabinet:	Table type					
Dimensions:	Height		597.5 mm			
	Width		798 mm			
	Depth		561 mm			
Mass:	31.5 kg					

Please refer to owner's manual in detail.